EDITOR'S NOTE

THE FOLLOWING PAGES WERE POOR HARD COPY AT THE TIME OF FILMING. IF AND WHEN A BETTER COPY CAN BE OBTAINED, A NEW FICHE WILL BE ISSUED.

GRANTED

99-8508 (2)

No. _____

Supreme Court, U.S.
FILED
MAR 7 2000
OFFICE OF THE CLERK

ORIGINAL

IN THE

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM 1999

DANNY LEE KYLLO,

Petitioner-Appellant.

v.

UNITED STATES OF AMERICA,

Respondent-Appellee,

Petition for a Writ of Certiorari
to the United States Court of Appeals
for the Ninth Circuit

PETITION FOR WRIT OF CERTIORARI

Kenneth Lerner, OSB #79484
851 S.W. Sixth Avenue, Suite 1600
Portland, Oregon 97204
(503) 223-0442
fax: (503) 223-3151
Attorney for Petitioner-Appellant

RECEIVED
MAR 2000
OFFICE OF THE CLERK
SUPREME COURT, U.S.

69 pp)

99-8508
Kyllo
v.
U.S.

QUESTION PRESENTED

I. WHETHER THE WARRANTLESS USE OF A THERMAL IMAGING DEVICE TO DETECT HEAT SOURCES WITHIN A HOME CONSTITUTES AN UNREASONABLE SEARCH AND SEIZURE UNDER THE FOURTH AMENDMENT TO THE UNITED STATES CONSTITUTION.

TABLE OF CONTENTS

INDEX TO APPENDICES III

TABLE OF AUTHORITIES IV

1. DECISION BELOW 2

2. JURISDICTIONAL STATEMENT 2

3. CONSTITUTIONAL PROVISION. 2

4. STATEMENT OF THE CASE. 2

5. FACTS AS STATED BY THE COURT OF APPEALS 5

6. REASONS FOR GRANTING THE WRIT. 6

I. WARRANTLESS USE OF A THERMAL IMAGING DEVICE TO DETECT HEAT SOURCES WITHIN A HOME CONSTITUTES AN UNREASONABLE SEARCH AND SEIZURE UNDER THE FOURTH AMENDMENT TO THE UNITED STATES CONSTITUTION 8

a. Application of Katz 10

b. Subjective Expectation of Privacy 10

i. The "waste heat" analogy used by the Ninth Circuit is fatally flawed.. 11

ii. A thermal imager is more intrusive than a dog sniff. 13

c. Reasonable Expectations 16

7. CONCLUSION 21

INDEX TO APPENDICES

Appendix A United States v. Kyllo (Kyllo III), 190 F.3d 1041 (9th Cir. 1999).

Appendix B Ninth Circuit Order denying Petition for Rehearing with Suggested Rehearing en banc.

Appendix C Ninth Circuit Order withdrawing Kyllo II and dispensing with Oral Argument United States v. Kyllo 184 F.3d 1059 (1999).

Appendix D Ninth Circuit Order granting government Petition for Rehearing, dated January 12, 1999.

Appendix E United States v. Kyllo (Kyllo II), 140 F.3d 1249 (9th Cir. 1998).

Appendix F United States v. Kyllo (Kyllo I), 37 F.3d 526 (9th Cir. 1994).

Appendix G District Court Opinion denying Motion to Suppress, dated December 4, 1992.

Appendix H District Court Order and Opinion on Remand denying Motion to Suppress, dated March 15, 1996.

Appendix I District Court Judgment.

TABLE OF AUTHORITIES

SUPREME COURT CASES

Alderman v. United States, 394 U.S. 165 (1969) 10
Arizona v. Hicks, 480 U.S. 321 (1987) 17
California v. Greenwood, 486 U.S. 35 (1988) 12, 19
Dow Chemical Co. v. United States, 476 U.S. 227 (1986) 6, 16
Florida v. Riley, 488 U.S. 445 (1989) 16, 17
Franks v. Delaware, 438 U.S. 154 (1978) 3
Katz v. United States, 389 U.S. 347 (1967) ..... passim
Minnesota v. Carter, 525 U.S. 83 (1998) 9, 10, 19
Minnesota v. Dickerson, 508 U.S. 366 (1993) 17
Oliver v. United States, 466 U.S. 170 (1984) 12, 16
Payton v. New York, 445 U.S. 573 (1980) 6, 10, 20
Segura v. United States, 468 U.S. 796 (1984) 9
Silverman v. United States, 365 U.S. 505 (1961) 20
Skinner v. Railway Labor Executives' Assn, 489 U.S 602 (1989) 17
United States v. Dunn, 480 U.S. 294 (1987) 16
United States v. Karo, 468 U.S. 705 (1984) ..... passim
United States v. Place, 462 U.S. 696 (1983) 13, 14, 15

COURT OF APPEALS CASES

United States v. Cusumano, 83 F.3d 1247 (10th Cir. 1996) (en banc)(McKay, Seymour, Henry, JJ. dissenting) 7, 11, 19
United States v. Ford, 34 F.3d 992 (11th Cir. 1994) 11
United States v. Ishmael, 48 F.3d 850 (5th Cir. 1995) 7, 11
United States v. Kyllo (Kyllo I), 37 F.3d 526 (9th Cir. 1994) 4
United States v. Kyllo (Kyllo II), 140 F.3d 1249 (9th Cir. 1998) 2, 4, 5
United States v. Kyllo (Kyllo III), 190 F.3d 1041 (9th Cir. 1999) ..... passim
United States v. Myers, 46 F.3d 668 (7th Cir. 1995) 11
United States v. Robinson, 62 F.3d 1325 (11th Cir. 1995) 11
United States v. Thomas, 757 F.2d 1359 (2nd Cir) cert. den. 474 U.S. 818 (1986) .. 15

DISTRICT COURT CASES

United States v. Field, 855 F. Supp. 1518 (W.D. Wis. 1994). 12, 14, 19

STATE COURT CASES

Commonwealth v. Gindlesperger, ___Pa.___, 743 A.2d 898 (Pa. 1999).....6, 19, 21
LaFollette v. Commonwealth, 915 S.W. 2d 747 (Ky. 1996).....7
People v. Deutsch, 44 Cal App 4th 1224, 52 Cal. Rptr. 2d 366 (1996).....7, 12, 19
State v. Cramer 174 Ariz. 147, 851 P2d 147 (Ariz. App. Div. 2 1992).....7
State v. McKee, 181 Wis.2d 354, 510 N.W.2d 807 (Wis. App. 1993).....7
State v. Neil 671 So.2d 1111 (La. App. 3 Cir. 1996).....7
State v. Seigel, 934 P.2d 176 (Mont. 1997).....7, 19
State v. Young, 867 P.2d 593 (Wash. 1994).....6, 12, 13, 19

CONSTITUTIONAL PROVISIONS

Fourth Amendment.....passim

STATUTES AND RULES

18 U.S.C. § 3553(f).....4
21 U.S.C. § 841(a)(1).....3
28 U.S.C. § 1254(1).....2

MISCELLANEOUS AUTHORITIES

A High-Tech Assault on the "Castle": Warrantless Thermal Surveillance of Private Residences and the Fourth Amendment, 90 NW Univ. L.R. 267, 270, 287-290 (1995).....11
Black's Law Dictionary, Revised Fourth Edition.....13
Marijuana Hot Spots: Infrared Imaging and the Fourth Amendment, 63 U Chic L R 655, 667-671 (1996).....12

No. _____

IN THE

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM 1999

DANNY LEE KYLLO,

Petitioner-Appellant.

v.

UNITED STATES OF AMERICA,

Respondent-Appellee,

Petition for a Writ of Certiorari
to the United States Court of Appeals
for the Ninth Circuit

Petitioner respectfully requests that a Writ of Certiorari issue to review the Judgment of the United States Court of Appeals for the Ninth Circuit entered on September 9, 1999 (Appendix A). A Petition for Rehearing with Suggestion for Rehearing En Banc was denied on December 14, 1999 (Appendix B).

1. Decision Below

In a 2-1 opinion filed September 9, 1999, a panel of the Ninth Circuit Court of Appeals affirmed the judgment of the United States District Court for the District of Oregon. United States v. Kyllo (Kyllo III), 190 F.3d 1041 (9th Cir. 1999). It did so only after withdrawing, and then reversing, the prior 2-1 opinion of the panel dated April 7, 1998, which had ruled in Mr. Kyllo's favor, and reversed the judgment of the district court. United States v. Kyllo (Kyllo II), 140 F.3d 1249 (9th Cir. 1998). The current judgment was achieved by replacing the author of the original panel after that judge resigned.

2. Jurisdictional Statement

This Court has jurisdiction over this case pursuant to 28 U.S.C. § 1254(1)

3. Constitutional Provision.

The Fourth Amendment to the United States Constitution states:

> The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

4. Statement Of The Case.

On January 27, 1992, a team of law enforcement agents executed a search warrant and an arrest warrant at Danny Kyllo's home in Florence, Oregon. Officers discovered and seized among other things, growing marijuana plants, growing

equipment, and dried marijuana. Mr. Kyllo was subsequently charged in a one-count indictment, with knowingly and intentionally manufacturing marijuana in violation of 21 U.S.C. § 841(a)(1).

Mr. Kyllo filed a motion to suppress the evidence, contending that the affidavit in support was recklessly and/or deliberately false and misleading in most important details. He also asserted that the warrantless use of a thermal imager to detect heat sources at his home constituted an unreasonable search and seizure under the Fourth Amendment.

The district court granted a hearing pursuant to Franks v. Delaware, 438 U.S. 154 (1978) limited to only one issue, and refused to take evidence on the issue of thermal imaging. The district court concluded that the use of thermal imaging did not constitute a search under the Fourth Amendment, and that the false and misleading statements and omissions were a matter of negligence rather than reckless disregard for the truth. Mr. Kyllo entered a conditional plea of guilty and was sentenced to a term of 63 months imprisonment. The district court granted him bail pending the outcome of his appeal of the denial of his motion to suppress.

On appeal the Ninth Circuit Court of Appeals vacated the conviction and remanded the case for a further Franks hearing and for an evidentiary hearing on the intrusiveness of the thermal imaging device. United States v. Kyllo (Kyllo I), 37

F.3d 526 (9th Cir. 1994). The district court conducted an evidentiary hearing and issued an opinion and order again denying Mr. Kyllo's motion to suppress.

At a resentencing, the court took additional testimony and determined that two firearms that had been found in Mr. Kyllo's home were not possessed in relation to the offense. The court then determined that he fit the criterion for safety valve treatment. 18 U.S.C. § 3553(f). After taking into account Mr. Kyllo's cooperativeness, his unblemished record, his steps toward rehabilitation, as well as his good conduct and full employment over the four year period that he had been on release, the court imposed a sentence of one month imprisonment, to be followed by a period of supervised release. The court again granted release pending appeal.

Mr. Kyllo appealed anew. This time, the Ninth Circuit concluded in a 2-1 decision that the purpose of the thermal imager is to reveal heat signatures of activities occurring inside a structure. United States v. Kyllo (Kyllo II), 140 F.3d 1249, 1253 (9th Cir. 1998). The majority held that this intrudes upon activity that is "sufficiently 'intimate' to give rise to a Fourth Amendment violation," Kyllo II, 140 F.3d at 125, and based on this constitutional violation, remanded the matter to the district court. The mandate was stayed by the government's petition for rehearing.

During the pendency of the government's petition for rehearing, the author of the Kyllo II opinion resigned from the bench, and a different judge was selected, over Mr. Kyllo's objection, as a replacement. This reconstituted panel granted the

government's petition for rehearing with one judge dissenting (Appendix D), dispensed with oral argument, and withdrew the Kyllo II opinion (Appendix C). This panel then issued a new 2-1 opinion holding that Mr. Kyllo had no subjective expectation of privacy, and that thermal imaging does not constitute a search under the Fourth Amendment. United States v. Kyllo (Kyllo III), 190 F.3d 1041, 1046 (9th Cir. 1999) (Appendix A).[1] A petition for rehearing with suggestion for rehearing en banc was denied (Appendix B).

5. Facts As Stated By The Court of Appeals.

> At 3:20 in the morning in mid-January [1992] from the passenger seat of a parked car on the street, Sergeant Daniel Haas ("Haas") of the Oregon National Guard examined the triplex of homes where Kyllo resided with an Agema Thermovision 210 thermal imaging device (the Agema 210"). All objects emit heat, in the form of infrared radiation, which can be observed and recorded by thermal imaging devices, such as the Agema 210. Specifically thermal imagers detect energy radiated from the outside surface of objects, and the internal heat that has been transmitted to the outside surface of an object, which may create a differential heat pattern.

Kyllo III, 190 F.3d at 1044 (9th Cir. 1999) (footnote omitted)

> Using the Agema 210, Haas concluded that there was high heat loss emanating from the roof of Kyllo's home above the garage, and from one wall. Haas also noted that Kyllo's house "showed much warmer" than the other two houses in the triplex. [Affiant] Elliott interpreted these results as further evidence of marijuana production,

[1] Every panel has agreed that the other information provided in, or omitted from, the search warrant affidavit was false and misleading, but that the district court had not clearly erred in finding that the statements and omissions were not in reckless disregard of the truth. The government has not suggested that the affidavit contains sufficient probable cause without the thermal imaging results. Kyllo III, 190 F.3d at 1050.

> inferring that the high levels of heat emission indicated the presence of high intensity lights used to grow marijuana indoors.

Id.

6. Reasons For Granting The Writ.

The use of thermal imaging is an issue of great national and constitutional significance, affecting the privacy rights of all citizens and law enforcement techniques in every jurisdiction of the United States. It raises the fundamental question of whether the Fourth Amendment's guarantee of personal security in one's home must yield to scientific advances that render our traditional barriers of privacy obsolete, or whether there is a core of privacy that police technology may not pierce without a warrant despite its capability of doing so. Certiorari should be granted in this case because:

1) the legal reasoning of the Kyllo III majority opinion is fundamentally flawed, and conflicts with relevant decisions of this Court in Katz v. United States, 389 U.S. 347 (1967), Payton v. New York, 445 U.S. 573, 601 (1980), United States v. Karo, 468 U.S. 705 (1984), and Dow Chemical Co. v. United States, 476 U.S. 227 (1986), among others;

2) the opinion conflicts with conclusions reached by the state supreme courts of Washington (State v. Young, 867 P.2d 593 (Wash. 1994)), Pennsylvania (Commonwealth v. Gindlesperger, ___Pa.___, 743 A.2d 898 (Pa. 1999)), and

Montana (State v. Seigel, 934 P.2d 176 (Mont. 1997))[2], as well as by the court of appeals of California (People v. Deutsch, 44 Call App 4th 1224, 52 Cal. Rptr. 2d 366 (1996)).[3]

3) with respect to Mr. Kyllo's subjective expectation of privacy, the panel's opinion conflicts with the Fifth Circuit Court of Appeals in United States v. Ishmael, 48 F.3d 850, 854-855 (5th Cir. 1995); and

4) the clear division of opinion demonstrated in this case history, and by the decision in United States v. Cusumano, 83 F.3d 1247, 1251-1265 (10th Cir. 1996) (en banc)(McKay, Seymour, Henry, JJ. dissenting) indicates that this Court needs to address whether thermal scanning of the home violates the Fourth Amendment protection against unreasonable searches and seizures. In this vein, this Court also needs to address the meaning of the "right of the people to be secure in their... houses" in the context of the growing sophistication of electronic surveillance techniques.

---

[2] While Seigel was decided on the basis of a state constitutional claim, the analysis was largely based on this Court's Katz test. State v. Seigel, 934 P.2d 176, 183 (Mont. 1997)

[3]There is a divergence of opinion among state courts having considered this issue. Some state courts have held that thermal imaging does not constitute a search. State v. Cramer 174 Ariz. 147, 851 P2d 147 (Ariz. App. Div. 2 1992); State v. McKee, 181 Wis.2d 354, 510 N.W.2d 807 (Wis. App. 1993); LaFollette v. Commonwealth, 915 S.W. 2d 747 (Ky. 1996); State v. Neil 671 So.2d 1111 (La. App. 3 Cir. 1996).

I. WARRANTLESS USE OF A THERMAL IMAGING DEVICE TO DETECT HEAT SOURCES WITHIN A HOME CONSTITUTES AN UNREASONABLE SEARCH AND SEIZURE UNDER THE FOURTH AMENDMENT TO THE UNITED STATES CONSTITUTION.

Thermal imaging permits the police to detect information that is unavailable to the unaided eye. Scientifically speaking, thermal imagers detect heat in the thermal infrared range of the electromagnetic scale, which is beyond the range of visible light. The information detected is converted to digital or visual information, enabling the operator to actually "see" what is invisible to the naked eye. For this reason, thermal radiation is not in "plain view".

The thermal imager is capable of determining the locations of temperature variations, heat anomalies, and unusual heat distribution patterns in a home by detecting heat emanating through the roof and walls. The better the machine, the more subtle are the variations of temperature that can be detected, and the more well-defined the image that is seen. The heat "signature" has a particular meaning to a trained operator, who surmised here that marijuana was growing in Mr. Kyllo's home. It can also reveal humans embracing in a dark room, or a person standing behind a door.

The use of thermal imaging to detect invisible thermal radiation as it passes through the walls of a house strips the citizenry of the most basic boundary of personal privacy by electronically gathering invisible information coming from the

interior of the home. Thus, thermal imaging is an unconstitutional search and seizure under the Fourth Amendment. It is the same type of electronic monitoring disapproved of in United States v. Karo, 468 U.S. 705, 715-716 (1984) and in Katz v. United States, 389 U.S. 347 (1967).

The 2-1 majority opinion below fails to discuss or distinguish the key case of Karo. Rather, it misapplies the Katz test, relying on questionable reasoning from other circuits, to hold that thermal imaging is not a search under the Fourth Amendment. This misuse of Katz threatens the personal security of the home guaranteed by the Fourth Amendment itself, and directly conflicts with repeated pronouncements from this Court that the home is a place of special constitutional stature, and a refuge for every citizen.

> ...it is beyond dispute that the home is entitled to special protection as the center of the private lives of our people. Security of the home must be guarded by the law in a world where privacy is diminished by enhanced surveillance and sophisticated communications systems.

Minnesota v. Carter, 525 U.S. 83, 99 (Kennedy, J. concurring). See, Segura v. United States, 468 U.S. 796, 810 (1984) (The sanctity of the home is not to be disputed because of the privacy interests in the activities that take place within.). To the Kyllo III majority, our walls are not physical barriers that assure our privacy, but are viewed as conduits of information that can be electronically scanned to reveal our private activities.

a. Application of Katz

At the outset, it should be noted that this Court has rarely, if ever, applied the Katz test in evaluating the search of a home. Because of the core privacy interests that the home represents, a person's expectation of privacy in that home is per se reasonable. Based on recent comments in Minnesota v. Carter, 525 U.S. 83, 97 (1998) (Scalia, J. concurring), it is questionable whether the Katz test applies at all to determine whether a search of the home has occurred. See also Payton, 445 U.S. at 576 (1980) (searches of public places are treated differently from those of the home).

Regardless of whether Katz applies to searches of residences, it was certainly never meant to diminish the security of the home from unreasonable searches and seizures.

> . . .[B]y holding that the Fourth Amendment protects persons and their private conversations, [Katz] was [not] intended to withdraw any of the protection which the Amendment extends to the home. . .

Alderman v. United States, 394 U.S. 165, 180 (1969). The Kyllo III case and those cases on which it relies present the classic example of how Katz can be improperly used to erode traditional notions of personal privacy in the home.

b. Subjective Expectation of Privacy

To the Kyllo III majority, the fact that Mr. Kyllo conducted his activities inside his home, shielded from the public domain, "may well show he had some subjective expectation of privacy in the operation", Kyllo III, 190 F.3d at 1046,

but this was somehow not enough. Even though Mr. Kyllo did not try to expel the heat in any way, he was faulted for taking "no affirmative action to conceal the waste heat emissions" Kyllo III, 190 F.3d at 1046, something that cannot by the laws of nature be contained. In this way, the majority concluded that Mr. Kyllo had no subjective expectation of privacy, relying on United States v. Robinson, 62 F.3d 1325 (11th Cir. 1995), United States v. Ford, 34 F.3d 992 (11th Cir. 1994), and United States v. Myers, 46 F.3d 668 (7th Cir. 1995).

i. The "waste heat" analogy used by the Ninth Circuit is fatally flawed.

The "waste heat" analogy is employed in every case where thermal imaging has been approved. As an argument it has been roundly criticized. The Fifth Circuit rejected it because it would "render Katz' first prong meaningless." United States v. Ishmael, 48 F.3d 850, 854-855 (5th Cir. 1995). Three judges of the Tenth Circuit question it. United States v. Cusumano, 83 F.3d 1247, 1256-1259 (10th Cir. 1996)(en banc)(McKay, Seymour and Henry, JJ. dissenting). It has been rejected by the Supreme Courts of Washington, Montana and Pennsylvania. See, also A High-Tech Assault on the "Castle": Warrantless Thermal Surveillance of Private Residences and the Fourth Amendment, 90 NW Univ. L.R. 267, 270, 287-290 (1995). And this Court may have rejected the analytical premise when it stated:

> The test of legitimacy is not whether the individual chooses to conceal assertedly "private" activity. Rather, the correct inquiry is whether the

government's intrusion infringes upon the personal and societal values protected by the Fourth Amendment.

Oliver v. United States, 466 U.S. 170, 182-183 (1984).

The waste heat analogy fundamentally relies on a misapplication of this Court's ruling in California v. Greenwood, 486 U.S. 35 (1988). It is neither good law nor good physics. People v. Deutsch, 44 Cal App 4th 1224, 52 Cal Rptr 2d 366, 368 (1996); Katz 389 U.S. at 362 (Harlan J., concurring).

Escaping heat is unlike garbage that is physically and intentionally taken to the curb for disposal.

> Taking out the trash is a conscious act that affirmatively demonstrates an abandonment of the contents of the trash can. Loss of heat from a home occurs, for the most part, without any conscious decision by the homeowner to relinquish it.

United States v. Field, 855 F. Supp. 1518, 1532 (W.D. Wis. 1994); See Kyllo III 190 F.3d at 1049 (Noonan, J. dissenting); Young, 867 P.2d at 602. The natural loss of heat from the home cannot be fairly characterized as abandoned, with the same connotation of intentionality, or assumption of a preventable risk of detection. See Marijuana Hot Spots: Infrared Imaging and the Fourth Amendment, 63 U Chic L R 655, 667-671 (1996). Additionally, heat emanating from a home is not accessible to a scavenging public. It can only be sensed by invading the curtilage from a remote location with a thermal imager or similar device.

Comparing naturally emanating heat to intentionally discarded garbage is antithetical to the holding in Katz. Such a word-over-analysis approach might surmise that as Katz spoke, he gave off "waste words," which traveled in sound waves to the surveillance device attached to the outside of the telephone booth. Under this approach, Katz could not have reasonably expected privacy because he allowed his sound waves to escape his mouth.

ii. A thermal imager is more intrusive than a dog sniff.

The Kyllo III majority also analogized the thermal image of "waste heat" to the dog sniffs that this Court approved in United States v. Place, 462 U.S. 696 (1983)(brief detention of a traveler's luggage in order to conduct a canine sniff is reasonable; sniff not a search or seizure under the Fourth Amendment). This analogy is insupportable under the language of Place itself.

First, a canine sniff is "sui generis," Place, 462 U.S. at 707, and therefore distinct from all other investigative procedures. Sui generis means "of its own kind or class; i.e. the only one of its kind". Black's Law Dictionary, Revised Fourth Edition (emphasis in original).

> We are aware of no other investigative procedure that is so limited both in the manner in which the information is obtained and in the content of the information revealed by the procedure.

Place, 462 U.S. at 707; see Young 867 P.2d at 603 (citing Place, supra.). Because the dog sniff is unique, it is inappropriate for comparisons or analogies.

Second, analysis of this Court's reasoning in Place demonstrates that thermal imaging is intrusive, far more than the limited dog sniff. A canine sniff is seen as less intrusive than other searches because it is discreet and does not expose noncontraband items that otherwise would remain hidden from public view. Place, 462 U.S. at 707. The dog's trained Pavlovian response is based on instinct, and the dog handler is only alerted to the existence of illegal drugs.

Thermal imaging does not distinguish between "contraband heat" and "legal heat" as the dog sniff distinguishes only illegal drugs that are contraband per se. Therefore, the thermal image is not as content limited as a dog sniff. A thermal image operator views all heat emanating from the home and is free to draw inferences about the sources of the heat. United States v. Field, 855 F. Supp. 1518, 1533 (W.D. Wis. 1994). The dog sniff never reveals other details about the interior of a piece of luggage. The thermal imager can detect if people are embracing inside a room, or standing near to a door. Thermal imaging is much broader in scope than the dog sniff, subject to much greater arbitrariness and manipulation, and has the ability to be expanded to greater domestic surveillance of legal activity.

Third, thermal imaging can never be characterized as instinctual as the dog's sniff. The animal reacts as trained without any interest in, or understanding of, the broader implications of its reaction. The thermal imager must be operated, and is subject to manipulation by a human being with greater understanding of factual

nuances and their legal implications. For this reason thermal imaging is more unreliable.[4] The operator introduces the reality of personal prejudices, professional esteem, and even the financial interests brought to bear by virtue of potential asset forfeiture. The fact that the operator can manipulate the image, choose to videotape or not, and interpret the image, all contrast with the unique nature of animal instinct.

Fourth, the Place doctrine applies to public places, not the home. See United States v. Thomas, 757 F.2d 1359, 1367 (2nd Cir.) cert. denied 474 U.S. 818 (1986) (use of a dog to sniff for drugs outside defendant's apartment was an unlawful search). The detention of a traveler's luggage is a highly specific situation that cannot be equated with surveillance of a private home.

Finally, the limited nature of information gained about the interior of a home, as well as the minimal intrusiveness of the technique have both been rejected as a basis for dispensing with the warrant requirement. Karo, 468 U.S. at 715-717. In the end, the fact that Mr. Kyllo chose to conduct his affairs inside his home, shielded from public scrutiny, must be sufficient to demonstrate that he subjectively wanted and expected privacy. Katz, 389 U.S. at 361 (Harlan, J. concurring) The Kyllo III majority view that this is not sufficient is a dangerous course that should be clearly rejected.

---

[4] A great deal of evidence was developed at the evidentiary hearing in this case about the unreliability of thermal imaging generally, about defects in certain thermal image "cameras" in particular such as the Agema 210, and the suspect nature of operating techniques used by law enforcement. See Kyllo III, 190 F.3d at 1048 (Noonan, J. dissenting).

c. Reasonable Expectations

The Kyllo III majority also concluded that any subjective expectation Mr. Kyllo may have had was not one that society would accept as "objectively reasonable" because thermal imaging does not reveal "intimate details". Kyllo III, 190 F.3d at 1046-47. This conclusion is reached by misapplying a key concept purportedly drawn from Dow Chemical Co. v. United States, 476 U.S. 227 (1986), and by wrenching a portion of a phrase out of context from a plurality opinion in Florida v. Riley, 488 U.S. 445, 452 (1989).

In Dow Chemical the core argument was that Dow had a right to protect its business secrets, and sought a bold extension of the Fourth Amendment to the "business curtilage". This Court noted that the magnified photographs were "limited to an outline of the facility's buildings and equipment" and did not reveal "intimate details." Dow Chemical, 476 U.S. at 238. This reference to intimate detail was only important for distinguishing the curtilage (a constitutionally protected extension of the home) from an open field, Oliver v. United States, 466 U.S. 170, 180 (1984); United States v. Dunn, 480 U.S. 294, 300-301 (1987), and so was part of the "business" curtilage analysis. The Dow Court specifically stated "[w]e find it important that this is not an area immediately adjacent to a private home, where privacy expectations are most heightened." Dow, 476 U.S. at 237 n.4.

The majority below wrenched the "intimate details" portion of this phrase from its complete context, Kyllo III, 190 F.3d at 1049 (Noonan, J. dissenting), which was an assessment of the extent of curtilage protection. As a result the majority set about assessing what is "intimate" enough to be protected inside the home. But this Court has already noted that a detail is intimate if it is "connected with the use of the home." Florida v. Riley, 488 U.S. at 452. It does not have to be a sexual secret, a conversation, or even the observation of a human being.[5]

In United States v. Karo, 468 U.S. 705, 715 (1984) this Court held that warrantless electronic beeper surveillance of a residence was as unconstitutional as if the agent had personally entered the home in secret. The Fourth Amendment does not allow the government to use an electronic device to determine "whether a particular article--or a person for that matter--is in an individual's home at a particular time." Karo, 468 U.S. at 716 "It is the exploitation of technological advances that implicates the Fourth Amendment." United States v. Karo, 468 U.S. 468 U.S. 705, 712 (1984).

---

[5] This Court has long regarded the search for informational details as worthy of Fourth Amendment protection. United States v. Karo, 468 U.S. 705 (1984) (electronic monitoring of beeper impulses coming from a home was unreasonable search and seizure); Arizona v. Hicks, 480 U.S. 321 (1987) (movement of stereo in order to expose serial numbers to view was unconstitutional search); Minnesota v. Dickerson, 508 U.S. 366 (1993) (police manipulate of hidden object was unwarranted search where nature of object is not immediately apparent); Skinner v. Railway Labor Executives' Assn, 489 U.S 602, 616-617 (1989) (collecting and testing urine is a search by intruding on reasonable expectations of privacy in medical facts that can be gleaned).

To accept the Kyllo III analysis would mean that any activities determined not to be intimate enough would fall outside constitutional protection simply by definition. However, constitutional protection of the home does not depend on the quantity or quality of information sought, and no court has ever assessed whether a search of the home has occurred based upon what was discovered. Such a rule would encourage police to rummage at will without restraint so long as they didn't find anything, or in the hope that what they found would later be held to be non-intimate.

This Court has never used the term "intimate details" as a test for determining whether a search of a home has occurred. Neither has this Court qualified any activities within the home as "intimate" or "non-intimate", thereby placing non-intimate activities beyond constitutional protection. Non-intimate activity within the home has never been declared an exception to the warrant requirement. Certiorari should be granted to address this misguided application of the Fourth Amendment.

The Kyllo III panel erred in other ways as well. First, if the Katz test is the proper one, the term "objectively reasonable" is not part of it. "[T]here is a twofold requirement, first that a person have exhibited an actual (subjective) expectation of privacy and, second, that the expectation be one that society is prepared to recognize as 'reasonable.'" Katz at 361 (Harlan, J., concurring). The altered "objectively reasonable" language can be traced to one statement in California v. Greenwood

486 U.S. at 39-40, that certainly was not meant as the basis of the Court's decision or as an alteration of the Katz test.

Second, the central problem in applying Katz is in divining just what society is prepared to accept as reasonable, not what is objectively reasonable. And as Justice Scalia recently noted, "unsurprisingly, those 'actual (subjective) expectation[s] of privacy" that society is prepared to recognize as 'reasonable" id., at 361, bear an uncanny resemblance to those expectations of privacy that this Court considers reasonable." Minnesota v. Carter, 525 U.S. 83, 97 (1998) (Scalia, J. concurring).

The dissenting judge below made a similar criticism, chiding the majority for imposing its (and two other circuits') notion of society's disapproval in the face of many contrary legal opinions about these societal values. See Commonwealth v. Gindlesperger, ___Pa.___, 743 A.2d 898 (Pa. 1999); State v. Young, 867 P.2d 593, 604 (Wash. 1994); People v. Deutsch, 44 Cal App 4th 1224, 52 Cal. Rptr. 2d 366 (1996); State v. Siegal, 934 P.2d 176 (Mont. 1997); United States v. Field, 855 F. Supp. 1518 (W.D. Wis. 1994); United States v. Cusumano, 83 F.3d 1247, 1251-1265 (10th Cir. 1996) (en banc)(McKay, Seymour, Henry, JJ. dissenting). In fact, the views on this subject appear to be rather divided, hardly a clear indication that society regards Mr. Kyllo's expectation as unreasonable.

Third, homes deserve heightened constitutional protection from searches and seizures. "[T]he overriding respect for the sanctity of the home...has been embedded in our traditions since the origins of the Republic." Payton v. New York, 445 U.S. 573, 601 (1980). The right of a person to retreat into the home and there be free from unreasonable governmental intrusion is at the very core of the Fourth Amendment. Silverman v. United States, 365 U.S. 505, 511 (1961). This repeated and unflinching protection of the home certainly reflects societies view that Mr. Kyllo's expectation of privacy was a reasonable one.

Other arguments, that thermal imagers are passive, emit no rays or beams, or do not physically penetrate the walls, are as irrelevant to this analysis as they were in relation to the microphone condemned in Katz, and the receiver faulted in Karo, both of which were also passive and non-intrusive. In Karo the passive monitoring of a beeper revealed "a critical fact about the interior of the premises that the Government [was] extremely interested in knowing and that it could not have otherwise obtained without a warrant". Karo, 468 U.S. at 715.

All activity occurring within the home is presumptively private as a matter of constitutional command, and thus protected from government surveillance by the Fourth Amendment. "At the very core [of the Fourth Amendment] stands the right of a [person] to retreat into his own home and there be free from unreasonable

governmental intrusion." Silverman 365 U.S. at 511. This is a right and expectation that this Court has long protected, and needs to re-affirm in this case.

7. Conclusion

The use of a thermal imager to electronically detect information emanating through the walls of one's house, information that is invisible and inaudible to the passerby, transgresses the Fourth Amendment when done by government agents without a warrant. The Kyllo III majority misapplied the Katz test to reduce the basic expectation of privacy in the home. It did so by ignoring the fact that the walls of one's house are physical barriers that present a clear desire for privacy, and represent a core societal value that the Fourth Amendment protects. By failing to address these social conventions, and the Constitutional command of security for the home, the opinion below subjugates the security and privacy of a citizen's home to advancing technological development. If the reasoning applied below is not corrected by this Court, there is no principled way that ever more invasive technology can be distinguished or constitutional restrained in the future. See State v. Gindlesperger, 743 A.2d at 903, fn 7.

For all of the reasons stated above, this Court should grant the Petition For A Writ of Certiorari.

Respectfully submitted, March 3, 2000.

Kenneth Lerner
Attorney for Petitioner-Appellant

No. _____

IN THE
SUPREME COURT OF THE UNITED STATES
OCTOBER TERM 1999

DANNY LEE KYLLO,

Petitioner-Appellant.

v.

UNITED STATES OF AMERICA,

Respondent-Appellee,

Petition for a Writ of Certiorari
to the United States Court of Appeals
for the Ninth Circuit

CERTIFICATE OF SERVICE

I, Kenneth Lerner, counsel of record and a member of the Bar of this Court, certify that pursuant to Rule 29.2, service has been made of the within Motion For Leave to Proceed in Forma Pauperis and Petition For Writ of Certiorari on the counsel for the respondent by depositing in the United States Post Office, in Portland,

Oregon on March 3, 2000, first class postage prepaid, a certified true, exact and full copy thereof addressed to:

Kristine Olson
United States Attorney
Robert Thomson
Assistant United States Attorney
310 W. Main
Medford, Oregon 97501

The Honorable Seth P. Waxman
Solicitor General
Department of Justice, #5712
950 Pennsylvania Ave., N.W.
Washington, D.C. 20530

Demetra Lambros
United States Department of Justice
601 D. Street NW
Room 6206
Washington, D.C. 20530

Further, the original and ten copies were mailed to the Honorable William K. Suter, Clerk of the United States Supreme Court, by depositing them in a United States Post Office Box, addressed to 1 First Street, N.E., Washington, D.C., 20543, for filing on March 3, 2000, with first-class postage prepaid.

DATED: March 3, 2000

Kenneth Lerner
Attorney for Petitioner-Appellant

SUBSCRIBED AND SWORN TO before me: 3/3/2000.

OFFICIAL SEAL
LYNNETTE M FERGUSSON
NOTARY PUBLIC-OREGON
COMMISSION NO. 308140
MY COMMISSION EXPIRES JAN 5,2002

Notary Public for Oregon
My Commission expires: 1.5.02

APPENDIX A

denied suppression motion, and defendant appealed. The Court of Appeals, Hawkins, Circuit Judge, held, as a matter of first impression in the circuit, that thermal imaging scan of home was not a "search" within the meaning of the Fourth Amendment, within the meaning of the Fourth Amendment.

Affirmed.

Noonan, Circuit Judge, filed a dissenting opinion.

Opinion, 140 F.3d 1249, superseded.

. **Criminal Law ⇐394.4(6)**

A district court must suppress evidence seized under a warrant when an affiant has knowingly or recklessly included false information in the affidavit.

2. Criminal Law ⇐1158(2)

A determination of whether false statements or omissions in application for search warrant are intentional or reckless is a factual finding, reviewed for clear error.

3. Criminal Law ⇐1139, 1158(2)

Court of Appeals reviews de novo the validity of a warrantless search and reviews for clear error any underlying factual findings.

4. Searches and Seizures ⇐26

The Fourth Amendment's restrictions on governmental searches and seizures are triggered when the government invades an individual's privacy, and the individual need not show actual intrusion or invasion into a protected space, as the Fourth Amendment protects people, and not simply areas, against unreasonable searches and seizures. U.S.C.A. Const.Amend. 4.

5. Searches and Seizures ⇐26

A two-part test is used to determine whether the Fourth Amendment has been violated by a claimed governmental intrusion into an individual's privacy: first, court evaluates whether the individual has made a showing of an actual subjective expectation of privacy, and then court asks whether this expectation is one that society recognizes as objectively reasonable. U.S.C.A. Const.Amend. 4.

6. Searches and Seizures ⇐26

In conducting evaluation of whether a reasonable expectation of privacy was infringing by thermal imaging scan of home, Court of Appeals would consider the facts of the case at hand, in which the scan did not reveal intimate details within the home, and defendant could not rely on extravagant generalizations about the potential invasions of privacy that this sort of advanced technology may some day present. U.S.C.A. Const.Amend. 4.

7. Searches and Seizures ⇐13.1

Thermal imaging scan of home was not a "search" within the meaning of the Fourth Amendment. U.S.C.A. Const. Amend. 4.

See publication Words and Phrases for other judicial constructions and definitions.

8. Searches and Seizures ⇐26

The correct inquiry as to whether a privacy expectation is objectively reasonable, for purposes of entitlement to Fourth Amendment protection, is whether the government's intrusion infringes upon the personal and societal values protected by the Fourth Amendment. U.S.C.A. Const. Amend. 4.

9. Searches and Seizures ⇐17

Activities within a residence are not protected from outside, non-intrusive, government observation, simply because they are within the home or its curtilage, and the use of technology to enhance government surveillance does not necessarily turn permissible non-intrusive observation into impermissible search; the crucial inquiry is whether the technology reveals intimate details. U.S.C.A. Const.Amend. 4.

10. Searches and Seizures ⇐112

In case in which search warrant affidavit relied in part on defendant's marriage in establishing probable cause, there was no clear error in finding that omission of defendant's divorce was not knowingly false or made in reckless disregard for the truth, where there was no evidence that law enforcement officers knew of the divorce nor that the failure to discover the divorce and include it in the affidavit was reckless.

11. Searches and Seizures ⇐112

It was proper for the magistrate judge to consider the portion of the search warrant affidavit related to defendant's marriage in determining whether probable cause existed to issue the warrant, despite failure of the warrant to disclose defendant's divorce, where the omission was not knowingly false, or made in reckless disregard for the truth. U.S.C.A. Const. Amend. 4.

Kenneth Lerner, Lerner & Meyer, Portland, Oregon, for the defendant-appellant.

Kristine Olson, United States Attorney, and Robert R. Thomson, Assistant United States Attorney, Medford, Oregon; Demetra Lambros, U.S. Department of Justice, Washington, D.C., for the plaintiff-appellee.

David K. Allen, Portland, Oregon, for amicus American Liberties Union Foundation of Oregon, Inc.

Appeal from the United States District Court for the District of Oregon Helen J. Frye, District Judge, Presiding. D.C. No. CR-92-00051-1-HJF.

Before: BRUNETTI,[1] NOONAN, and HAWKINS, Circuit Judges.

Opinion by Judge HAWKINS; Dissent by Judge NOONAN.

MICHAEL DALY HAWKINS, Circuit Judge:

As a matter of first impression in this circuit, Danny Lee Kyllo ("Kyllo") challenges the warrantless use of a thermal imaging device as a violation of the Fourth Amendment. Kyllo also challenges reliance on a portion of an affidavit discussing his marriage to Luanne Kyllo ("Luanne"), but omitting mention of his divorce, arguing it should not have been considered in determining whether there was probable cause to issue a warrant to search his home. We affirm, holding that the thermal image scan performed was not a search within the meaning of the Fourth Amendment, and that the district court did not clearly err in finding the omission of the Kyllos' divorce from the affidavit was not knowingly false or made in reckless disregard for the truth.

Factual and Procedural Background

Kyllo's arrest and conviction on one count of manufacturing marijuana in violation of 21 U.S.C. § 841(a)(1) followed an investigation by a law enforcement task force into a possible conspiracy to grow and distribute marijuana. While investigating the activities of Tova Shook, the daughter of the task force's original target, William Elliott ("Elliott"), an agent of the United States Bureau of Land Management, an agency participating in the task force, began to suspect Kyllo.

Oregon state law enforcement officers provided information to Elliott that strengthened his suspicions. He was told that Kyllo and Luanne resided in one unit of a triplex, another unit of which was occupied by Tova Shook and that a car registered jointly to Luanne and Kyllo parked at the triplex. Elliott was also informed that Luanne had been arrested the month before for delivery and possession of a controlled substance and that Kyllo had once told a police informant that he and Luanne could supply marijuana.

Elliott then subpoenaed Kyllo's utility records. Elliott compared the records to a spreadsheet for estimating average electrical use and concluded that Kyllo's electrical usage was abnormally high, indicating a possible indoor marijuana grow operation.

1. Judge Brunetti has been drawn to replace the Honorable Robert R. Merhige, Jr., Senior United States District Judge for the Eastern District of Virginia, in this case

Id. at 21, 107 S.Ct. 2211 (quotation omitted).

The apprentice prevailing wage law in this case is indistinguishable from the state laws at issue in *Metropolitan Life Insurance* and *Fort Halifax Packing*. The apprentice prevailing wage law treats union and non-union employees equally, provides minimum protection to individual workers who work on public works projects, and mandates nothing more than one of two possible minimum benefits. Either apprentices receive the prevailing journeyman's wage or they receive training and education that has been approved by the state. Apprentices might not receive either one of these benefits through the collective bargaining process alone, but that possibility is not, in and of itself, enough to warrant NLRA preemption. *Fort Halifax Packing*, 482 U.S. at 21, 107 S.Ct. 2211. Sound Systems cannot evade minimum labor standards by executing a collective bargaining agreement that fails to satisfy state standard and then asserting federal preemption. *Metropolitan Life Ins.*, 471 U.S. at 755, 105 S.Ct. 2380 and this court "'cannot declare pre-empted all local regulation that touches or concerns in any way the complex interrelationships between employees, employers, and unions; obviously, much of this is left to the states.'" *Id.* at 757, 105 S.Ct. 2380 (quoting *Motor Coach Employees v. Lockridge*, 403 U.S. 274, 289, 91 S.Ct. 1909, 29 L.Ed.2d 473 (1971)).

There is no merit to Dillingham's assertion that *Bechtel Constr., Inc. v. United Bhd. of Carpenters & Joiners of Am.*, 812 F.2d 1220 (9th Cir.1987), supports its position that the apprentice prevailing wage law is preempted by the NLRA. In *Bechtel Construction*, this court found that California's apprentice wage standards were preempted by the NLRA because the apprentice wage standards could be undercut by a collective bargaining agreement that was approved by the State and were, therefore, not true minimum labor standards. *Bechtel Constr.*, 812 F.2d at 1226. The apprentice prevailing wage law at issue in this case cannot be undercut because it establishes true legal minimums and *Bechtel Construction* does not stand for the proposition that true minimum wages or minimum apprenticeship program standards are preempted by the NLRA.

The apprentice prevailing wage law is not preempted by the NLRA under the *Machinists* doctrine because Congress has not intended to leave apprenticeship standards unregulated and because the prevailing wage law only establishes minimum labor standards.

3. *Garmon*/NLRB Jurisdiction Preemption

[9, 10] Under the *Garmon* preemption doctrine, the NLRA preempts state laws that attempt to regulate conduct which is either arguably protected or prohibited by the NLRA. *Garmon*, 359 U.S. at 244, 79 S.Ct. 773. This is true whether the state law is a law of general application or a law directed specifically toward labor relations. *Id. Garmon* preemption is "designed to prevent conflict between, on the one hand, state and local regulation and, on the other, Congress' integrated scheme of regulation . . . which includes the choice of the NLRB, rather than state or federal courts, as the appropriated body to implement the Act." *Associated Builders & Contractors*, 507 U.S. at 225, 113 S.Ct. 1190 (internal quotations omitted). The apprentice prevailing wage law is not preempted by the *Garmon* preemption doctrine because it does not attempt to regulate conduct that is protected or prohibited by the NLRA.

[11] Appellants argue that the apprentice prevailing wage law is preempted by *Garmon* because the apprentice prevailing wage law disrupts the right to bargain collectively for wage rates and apprenticeship standards. This argument is meritless. *See Fort Halifax Packing*, 482 U.S. at 20, 107 S.Ct. 2211 ("This argument-that a State's establishment of minimum labor standards undercuts collective bargaining-was considered and rejected in *Metropolitan Life Ins. Co. v. Massashusetts*.") Minimum labor standards do not affect the collective bargaining process because minimum labor standards treat all workers-union and non-union-equally and neither encourage nor discourage the collective bargaining process. *Metropolitan Life Ins.*, 471 U.S. at 755, 105 S.Ct. 2380. Because minimum labor standards do not affect the collective bargaining process, minimum labor standards do not affect or regulate the right to bargain collectively. *See Viceroy Gold Corp. v. Aubry*, 75 F.3d 482, 490 (9th Cir.1996) (minimum labor standards are not preempted by *Garmon* because they do not affect the collective bargaining process). Even though the apprentice prevailing wage law establishes minimum wages and minimum apprenticeship standards below which a collective bargaining agreement cannot go, the apprentice prevailing wage law does not affect the § 7 rights of workers and is not preempted by the NLRA under *Garmon*.

Dillingham again relies on this court's decision in *Bechtel Construction* to argue that the apprentice prevailing wage law is preempted by the NLRA under *Garmon*. *Bechtel Construction*, as discussed above, is distinguishable. In *Bechtel Construction*, this court found that California's apprentice wage standards were preempted by the NLRA because the apprentice wage standards could be undercut by a collective bargaining agreement and because state officials could participate in the collective bargaining process to approve below standard wages. *Bechtel Constr.*, 812 F.2d at 1226. The right to bargain collectively was, therefore, affected by the apprentice wage standards because the wage standards were not true legal minimums and because the state became a second bargaining agent. In contrast, the apprentice prevailing wage law establishes true minimum standards for apprenticeship programs, establishes a minimum wage to be paid to workers on public works projects, and does not inject the state into the collective bargaining process.

The apprentice prevailing wage law is not preempted by the NLRA under the *Garmon* preemption doctrine because the apprentice prevailing wage law does not affect the right to bargain collectively. The apprentice prevailing wage law only establishes minimum labor standards that treat all workers equally and neither encourages nor discourages the collective bargaining process.

IV. CONCLUSION

The apprentice prevailing wage is state regulation that is not preempted by the NLRA. The district court's order granting the State of California summary judgement is **AFFIRMED.**

UNITED STATES of America, Plaintiff-Appellee,

v.

Danny Lee KYLLO, Defendant-Appellant.

No. 96-30333.

United States Court of Appeals, Ninth Circuit.

Argued and Submitted Nov. 5, 1997.

Opinion Decided April 7, 1998.

Petition for Rehearing with Suggestion for Rehearing En Banc Decided May 20, 1998.

Petition for Panel Rehearing Granted Jan. 12, 1999.

Opinion Withdrawn July 29, 1999.

Decided Sept. 9, 1999.

Defendant entered a conditional guilty plea to manufacturing marijuana, and then appealed the denial of a suppression motion. Following remand, 37 F.3d 526, the United States District Court for the District of Oregon, Helen J. Frye, J., again

[7] Kyllo argues in opposition that the thermal scan intruded into activities within his home, in which he had an expectation of privacy, rather than measuring "waste heat" emitted from his home. We disagree with Kyllo, and follow our sister circuits in holding that the use of thermal imaging technology in this case did not constitute a search under contemporary Fourth Amendment standards. *See United States v. Robinson*, 62 F.3d 1325 (11th Cir.1995); *United States v. Myers*, 46 F.3d 668 (7th Cir.1995); *United States v. Ishmael*, 48 F.3d 850 (5th Cir.1995); *United States v. Pinson*, 24 F.3d 1056 (8th Cir. 1994).[7] Whatever the "Star Wars" capabilities this technology may possess in the abstract, the thermal imaging device employed here intruded into nothing.

A. Subjective Expectation of Privacy

We reject Kyllo's argument that what occurred late that January night was government intrusion into activities in his home, in which he expected privacy, rather than a measurement of heat emissions radiating from his home. While Elliott inferred, correctly as it turned out, from the unusually high levels of thermal emissions being radiated from the roof and wall that a marijuana grow was within Kyllo's home, the Agema 210 did not literally or figuratively penetrate the walls of the Kyllo residence to expose this activity.

While Kyllo's decision to move his marijuana-growing operation indoors may well show he had some subjective expectation of privacy in the operation, he took no affirmative action to conceal the waste heat emissions created by the heat lamps needed for a successful indoor grow. The Agema 210 scan simply indicated that seemingly anomalous waste heat was radiating from the outside surface of the home, much like a trained police dog would be used to indicate that an object was emitting the odor of illicit drugs. *See United States v. Place*, 462 U.S. 696, 706–07, 103 S.Ct. 2637, 77 L.Ed.2d 110 (1983) (holding canine sniffs are not searches). Kyllo made no attempt to conceal these emissions, demonstrating a lack of concern with the heat emitted and a lack of a subjective privacy expectation in the heat. *See Robinson*, 62 F.3d at 1328–29; *Myers*, 46 F.3d at 669–70; *United States v. Ford*, 34 F.3d 992, 995 (11th Cir.1994). *But see Ishmael*, 48 F.3d at 854–55 (finding subjective expectation of privacy although determining it was unreasonable). We conclude, like the district court, that the Agema 210's scan measured waste heat emissions that Kyllo had made no attempt to conceal, rather than peering into Kyllo's home, and that Kyllo has demonstrated no subjective expectation of privacy in these emissions from his home.

B. Objectively Reasonable Expectation

[8] Even if Kyllo could demonstrate a subjective expectation of privacy in the heat emissions from his residence, he has not established that this privacy expectation would be accepted by society as "objectively reasonable." "[T]he correct inquiry is whether the government's intrusion infringes upon the personal and societal values protected by the Fourth Amendment." *Oliver*, 466 U.S. at 182–83, 104 S.Ct. 1735.

[9] While a heightened privacy expectation in the home has been recognized for purposes of Fourth Amendment analysis, *see Dow Chemical*, 476 U.S. at 237 n. 4, 106 S.Ct. 1819, activities within a residence are not protected from outside, non-intrusive, government observation, simply because they are within the home or its curtilage. *See Florida v. Riley*, 488 U.S. 445, 449, 109 S.Ct. 693, 102 L.Ed.2d 835 (1989) (plurality opinion); *Ciraolo*, 476 U.S. at 213, 106 S.Ct. 1809. The use of technology to enhance government surveillance does not necessarily turn permissible non-intrusive observation into impermissible search. *See id.*; *Dow Chemical*, 476 U.S. at 238–39, 106 S.Ct. 1819. Much like the Fifth Circuit, we believe that, in evaluating whether technology has been used to aid in permissible observation or to perform an impermissible warrantless search, the "crucial inquiry, as in any search and seizure analysis, is whether the technology reveals 'intimate details.'" *Ishmael*, 48 F.3d at 855 (quoting *Dow Chemical*, 476 U.S. at 238, 106 S.Ct. 1819).

The thermal emission scan performed on Kyllo's residence, and the other houses in the triplex, while giving information unavailable to the naked eye, did not expose any intimate details of Kyllo's life. The scan merely indicated amorphous "hot spots" on the roof and exterior wall and not the detailed images of private activity that Kyllo suggests the technology could expose. "Such information is neither sensitive nor personal, nor does it reveal the specific activities within the ... home." *Ford*, 34 F.3d at 997; *see also Pinson*, 24 F.3d at 1059. Like the Court in *Dow Chemical*, we reject Kyllo's attempt to rely on "extravagant generalizations" about the potential invasions of privacy that this sort of advanced technology may someday present. *See Dow Chemical*, 476 U.S. at 239, 106 S.Ct. 1819.

Considering the facts of this case, and the district court's findings on the technology used, we cannot conclude that this surveillance was "so revealing of intimate details as to raise constitutional concerns." *Id.* While this technology may, in other circumstances, be or become advanced to the point that its use will step over the edge from permissible non-intrusive observation into impermissible warrantless search, we find no violation of the Fourth Amendment on these facts. *See id.* at 239 and n. 5, 106 S.Ct. 1819; *Myers*, 46 F.3d at 670 n. 1.

II. Omission of Divorce from the Affidavit

[10] On remand, the district court concluded that it was misleading for Elliott to omit from his Affidavit seeking the search warrant that Kyllo and Luanne had divorced. The court then concluded, however, that the omission was not knowingly false, or made in reckless disregard for the truth. Kyllo contests this conclusion.

At the hearing, no evidence was presented that Elliott, or the Oregon law enforcement officers who passed on information to him, knew of the divorce. Neither was there evidence showing that the failure to discover the divorce and include it in the affidavit was reckless.

[11] It was not clearly erroneous for the district court to find that the omission of the divorce was not knowingly false or made in reckless disregard for the truth. *See Dozier*, 844 F.2d at 705. Thus, we agree with the district court that it was proper for the magistrate judge to consider the portion of the affidavit related to Kyllo's marriage to Luanne in determining whether probable cause existed to issue the warrant.

AFFIRMED.

NOONAN, Circuit Judge, dissenting:

The Thermovision 210, made and marketed by Agema Infrared Systems, (herein the Agema 210) is described by its maker in the following terms: "For law enforcement agencies and security organizations it provides a state-of-the-art means of extending operational capabilities and securing hard evidence not possible before. And it does it unobtrusively, noiselessly and immediately, requiring a minimum of operator training and effort." As to "Interior Surveillance," the company's sales brochure that is part of the record on appeal states: "With a field view of 8 degrees by 16 degrees, the 210, properly positioned, can monitor activity in critical

7. A Tenth Circuit panel opinion in *United States v. Cusumano*, 67 F.3d 1497, 1510 (10th Cir.1995) finding warrantless use of a thermal imager violated the Fourth Amendment was vacated by an en banc court, and the case decided without reaching the question. *See United States v. Cusumano*, 83 F.3d 1247 (10th Cir.1996) (en banc). We also note that the Montana Supreme Court's holding that thermal imaging in this context was a "search" was decided under a state constitutional provision, more protective of privacy than the federal constitution. *See State v. Siegal*, 281 Mont. 250, 934 P.2d 176, 183 (1997).

At 3:20 in the morning in mid-January from the passenger seat of a car parked on the street, Sergeant Daniel Haas ("Haas") of the Oregon National Guard examined the triplex of homes where Kyllo resided with an Agema Thermovision 210 thermal imaging device ("the Agema 210").[2] All objects emit heat, in the form of infrared radiation, which can be observed and recorded by thermal imaging devices, such as the Agema 210. Specifically, thermal imagers detect energy radiated from the outside surface of objects, and internal heat that has been transmitted to the outside surface of an object, which may create a differential heat pattern.

In performing its function the Agema 210 passively records thermal emissions rather than sending out intrusive beams or rays—acting much like a camera.[3] A viewfinder then translates and displays the results to the human eye, with the area around an object being shaded darker or lighter, depending on the level of heat being emitted. While at first used primarily by the military, thermal scanners have entered into law enforcement and civilian commercial use.[4]

Using the Agema 210, Haas concluded that there was high heat loss emanating from the roof of Kyllo's home above the garage, and from one wall. Haas also noted that Kyllo's house "showed much warmer" than the other two houses in the triplex. Elliott interpreted these results as further evidence of marijuana production, inferring that the high levels of heat emission indicated the presence of high intensity lights used to grow marijuana indoors.

Elliott presented this information in an Affidavit to a magistrate judge, seeking a search warrant for the Kyllo home. The warrant was issued and Elliott searched Kyllo's home. As Elliott had suspected, an indoor marijuana grow operation was found, with more than one hundred plants. Marijuana, weapons, and drug paraphernalia were seized.

Kyllo was indicted for manufacturing marijuana, based upon the evidence seized during the search. The district court denied Kyllo's motion to suppress the seized evidence, following a hearing. Kyllo entered a conditional guilty plea and was sentenced to a prison term of 63 months. Kyllo then appealed the denial of the suppression motion, challenging several portions of the Affidavit as well as the warrantless thermal imager scan.

A panel of this court found that while the portion of Elliott's Affidavit discussing Kyllo's energy usage was false and misleading, the false statements were not knowingly or recklessly made. *See United States v. Kyllo*, 37 F.3d 526 (9th Cir.1994). While concluding it was therefore proper for the magistrate judge to consider that portion of the Affidavit in determining probable cause to issue the search warrant, the panel remanded for an evidentiary hearing on the intrusiveness and capabilities of the Agema 210 and a *Franks*[5] hearing on whether Elliott had knowingly or recklessly omitted Kyllo and Luanne's divorce from his Affidavit. *See id.* at 531.

Following a hearing on remand, the district court concluded that the omission of the divorce from the Affidavit, while misleading, was not knowingly false or made in reckless disregard for the truth. *See United States v. Kyllo*, No. Cr. 92-51-FR, 1996 WL 125594 (D.Or. Mar. 15, 1996).

2. Conducting a thermal emissions scan at night is a common practice, as it decreases the likelihood that "solar loading"—daytime solar energy accumulation by an object—will interfere with the effectiveness of the scan.

3. Like all objects, thermal imagers themselves emit some level of infrared radiation.

4. Besides building scans such as the scan in question in this case, thermal imagers are used by law enforcement to aid in tasks including search and rescue, locating fugitives, perimeter security, and tracking covert illegal waste discharges. Commercial uses of thermal imagers include checks for moisture in roofs, overloading power lines, and faulty building insulation.

5. *See Franks v. Delaware*, 438 U.S. 154, 98 S.Ct. 2674, 57 L.Ed.2d 667 (1978).

The district court, after hearing further evidence, made factual findings on the capabilities of the Agema 210 and concluded no warrant was required before the thermal scan. The district court therefore found probable cause to issue the warrant, and denied the motion to suppress. *See id.* Kyllo now challenges this decision.[6]

Standard of Review

[1, 2] "A district court must suppress evidence seized under a warrant when an affiant has knowingly or recklessly included false information in the affidavit." *See United States v. Dozier*, 844 F.2d 701, 705 (9th Cir.1988). Because it is a factual finding, we review for clear error a determination of whether false statements or omissions are intentional or reckless. *See id.*; *United States v. Senchenko*, 133 F.3d 1153 (9th Cir.1998).

[3] We review de novo the validity of a warrantless search. *See United States v. Van Poyck*, 77 F.3d 285, 290 (9th Cir. 1996); *United States v. Ogbuehi*, 18 F.3d 807, 812 (9th Cir.1994). We review for clear error any underlying factual findings. *See Ornelas v. United States*, 517 U.S. 690, 699, 116 S.Ct. 1657, 134 L.Ed.2d 911 (1996); *United States v. Hernandez*, 27 F.3d 1403, 1406 (9th Cir.1994).

Analysis

I. Search and Seizure Analysis

[4, 5] Kyllo's essential claim is that a warrant was constitutionally necessary before the government could employ the thermal imaging device. The Fourth Amendment's restrictions on governmental searches and seizures are triggered when the government invades an individual's privacy. *See Oliver v. United States*, 466 U.S. 170, 177–78, 104 S.Ct. 1735, 80 L.Ed.2d 214 (1984). The individual need not show actual intrusion or invasion into a "protected space," as "the Fourth Amendment protects people—and not simply 'areas'—against unreasonable searches and seizures." *Katz v. United States*, 389 U.S. 347, 353, 88 S.Ct. 507, 19 L.Ed.2d 576 (1967). We follow a two-part test to determine whether the Fourth Amendment has been violated by a claimed governmental intrusion into an individual's privacy. *See id.* at 361, 88 S.Ct. 507 (Harlan, J., concurring); *see also Smith v. Maryland*, 442 U.S. 735, 740, 99 S.Ct. 2577, 61 L.Ed.2d 220 (1979) (adopting *Katz* reasoning). We evaluate whether the individual has made a showing of an actual subjective expectation of privacy and then ask whether this expectation is one that society recognizes as objectively reasonable. *See Katz*, 389 U.S. at 361, 88 S.Ct. 507 (Harlan, J., concurring); *see also California v. Ciraolo*, 476 U.S. 207, 211, 106 S.Ct. 1809, 90 L.Ed.2d 210 (1986).

[6] In conducting this evaluation of whether a reasonable expectation of privacy has been infringed upon by government action, we consider the facts of the case at hand. *See Dow Chemical Co. v. United States*, 476 U.S. 227, 239 n. 5, 106 S.Ct. 1819, 90 L.Ed.2d 226 (1986); *United States v. Karo*, 468 U.S. 705, 712, 104 S.Ct. 3296, 82 L.Ed.2d 530 (1984) ("[W]e have never held that potential, as opposed to actual, invasions of privacy constitute searches for purposes of the Fourth Amendment.").

No one disputes that a warrant was not obtained before the Agema 210 was used to scan the thermal emissions from Kyllo's house. In its inquiry into the technological capacities of the Agema 210, the district court found that it was a "non-intrusive device which emits no rays or beams and shows a crude visual image of the *heat* being radiated from the *outside* of the house." The court also found that "the device cannot and did not show any people or activity within the walls of the structure" and that it "recorded only the heat being emitted from the home." Based upon a review of the record, we cannot conclude that these findings were in clear error. *See Ornelas*, 517 U.S. at 699, 116 S.Ct. 1657.

6. We note that a previously filed disposition of this appeal was withdrawn

praised as "the most exhaustive and compelling analysis of the use of a thermal imager." Wayne R. LaFave, *Search and Seizure: A Treatise on the Fourth Amendment*, § 2.2 (Supp.1998). Professor LaFave himself argues forcefully in support of the analysis and conclusion. *See id.* The expectation analyzed by *Cusumano* and LaFave is not the expectation of the homeowner as to the emissions from the roof, but the homeowner's expectation as to the privacy of the interior of the home. That the interior is the proper focus is argued by analogy with *Katz*—in *Katz* the focus having been on the phone conversation, not on "the molecular vibrations of the glass that encompassed [the] interior," which were the vibrations actually picked up by the bug. *Cusumano*, 67 F.3d at 1501. Technological enhancement that reveals conversation is impermissible. *See Katz*, 389 U.S. at 353, 88 S.Ct. 507.

The first reaction when one hears of the Agema 210 is to think of George Orwell's *1984*. Although the dread date has passed, no one wants to live in a world of Orwellian surveillance. On the hearing of this case on its first appeal we were prompt to express concern as to whether the Agema 210 could "detect sexual activity in the bedroom," and to state that a technology revealing sexual activity was impermissible. *United States v. Kyllo*, 37 F.3d 526, 530 (9th Cir.1994). On this appeal the majority does not deviate from this position while it views the Orwellian dangers as speculative and at most potential.

The Agema 210 is a crude instrument. It reveals only two things: Heat-causing activity within a home and the rooms or area where the heat is being generated. For the majority these limited capacities let the Agema 210 pass muster: The "crucial inquiry" for the majority is whether the Agema 210 reveals "intimate details." Because what it reveals is not sensitive or personal or a specific activity, no unconstitutional search is being performed. It is as though if your home was searched by a blind policeman you would have suffered no constitutional deprivation.

The majority's error has been to focus on a phrase from dicta on *Dow Chemical Co. v. United States*, 476 U.S. 227, 106 S.Ct. 1819, 90 L.Ed.2d 226 (1986). At issue in *Dow Chemical* was aerial photography of a 2,000 acre manufacturing plant. The Court held: "We conclude that the open areas of an industrial plant complex with numerous plant structures spread over an area of 2,000 acres are not analogous to the 'curtilage' of a dwelling for purposes of aerial surveillance." *Id.* at 239, 106 S.Ct. 1819. In reaching this conclusion, the Court observed: "It may well be, as the Government concedes, that surveillance of private property by using highly sophisticated surveillance equipment not generally available to the public, such as satellite technology, might be constitutionally proscribed absent a warrant. But the photographs here are not so revealing of intimate details as to raise constitutional concerns." *Id.* at 238, 106 S.Ct. 1819. To rely on the phrase "intimate details" as stating the criterion is to wrench the phrase from context. *Dow Chemical* was not about a home, an enclosed space or anything going on in a home. If *Dow Chemical* is to be invoked at all, the dicta on intimate details is controlled by the dicta warning on the use of "highly sophisticated surveillance equipment not generally available to the public." *Id.* Because of its error as to the crucial inquiry, the majority sees the dangers presented by the Agema 210 as merely potential, not actual. To the contrary, the intrusion into the home, while gross and global, is also real. A variety of heat-producing activities can take place within the walls of a home. As to such of these activities as are innocent, no one doubts that society views the expectation of privacy as reasonable—for example, the use of a sauna in a sauna room; the making of ceramics in a kiln in the basement; the hothouse cultivation of orchids, poinsettias or other plants in a domestic greenhouse. Any of such activities can cause the emission of heat from the home which the Agema 210 can detect. The activity will be reported as well as

where it is taking place. That is the present, not potential, intrusion of privacy which the Agema 210 can effect.

The defense of the machine that it does not see very well hurts the government by underscoring the unreliability of the Agema 210. This defense amounts to saying that if a constable makes a blundering search, it should not really count as a search. The argument is the opposite of that which justified the examinations in *United States v. Place*, 462 U.S. 696, 707, 103 S.Ct. 2637, 77 L.Ed.2d 110 (1983), and *Jacobsen*, 466 U.S. at 123, 104 S.Ct. 1652,—they revealed only contraband and nothing else. The machine as blind or blundering constable does not pass the criteria of the Fourth Amendment.

The government does not contend that the information provided the magistrate was sufficient to sustain a search warrant without the addition of the Agema readings. As these readings violated the Constitution, they should be suppressed and the conviction reversed.

AMERICAN AD MANAGEMENT, INC., a California Corporation; O'Connor Agency, Plaintiffs-Appellants,

v.

GENERAL TELEPHONE COMPANY OF CALIFORNIA; GTE Directories Corporation; GTE Directories Publishing Corp.; GTE Directories Service Corporation; GTE National Marketing Service Corp.; GTE Directories Sales Corp., Defendants-Appellees.

No. 97-55679.

United States Court of Appeals, Ninth Circuit.

Argued and Submitted Dec. 10, 1998.

Decided Sept. 9, 1999.

Authorized sellers of yellow pages advertising brought antitrust action against publisher of yellow pages. The United States District Court for the Central District of California, Lourdes G. Baird, J., granted summary judgment to publisher, and sellers appealed. The Court of Appeals, 92 F.3d 781, reversed. On remand, the District Court again granted summary judgment for publisher, and sellers appealed. The Court of Appeals, Tashima, Circuit Judge, held that: (1) sellers established antitrust standing, and (2) reassignment to different district court judge on remand was not warranted.

Reversed and remanded.

1. Federal Courts ⇐776

Court of Appeals reviews the grant of summary judgment de novo.

2. Federal Courts ⇐776

Antitrust standing is a question of law reviewed de novo.

3. Monopolies ⇐28(1.6)

Antitrust standing is distinct from Article III standing, as a plaintiff who satisfies the constitutional requirement of injury in fact is not necessarily a proper party to bring a private antitrust action. U.S.C.A. Const. Art. 3, § 2.

4. Monopolies ⇐28(1.6)

To conclude that there is antitrust standing, a court need not find in favor of the plaintiff on each relevant factor, as set forth in Supreme Court's *Associated General* opinion, since generally no single factor is decisive; instead, court balances the factors, although it gives great weight to the nature of the plaintiff's alleged injury.

5. Monopolies ⇐28(1.6)

Authorized sellers of yellow pages advertising, which were essentially brokers for advertisements, had antitrust standing to bring action against publisher of yellow pages under Clayton Act, as alleged injury, resulting from alleged conspiracy to eliminate sellers' commissions on local accounts, was antitrust injury, alleged injury

rooms or large facilities, once again providing a permanent time-tagged record when connected to a VCR."

The Agema 210 does not determine temperature but depends for its results on a comparison between the emissions from similar structures. It is not evident how these comparisons are reliable when the operator of the Agema 210 has no information about the interior insulation of either the structure he is examining or the structure he is using for comparison. The reliability of the readings of the machine is itself affected by the operator's decision to adjust it. The defendant's expert witness, who had had extensive experience working for the FBI, analyzed its vulnerability in these terms: "These infrared cameras can easily be manipulated to make a structure appear to be hot, when in reality it is not. This is achieved by increasing the gain and sensitivity buttons on the camera. The procedure is similar to using a 35 mm camera and manually opening the aperture on the lens." It is this manipulable, not very accurate or reliable but easily usable, surveillance machine which is at issue here.

The Fourth Amendment forbids an unreasonable search by the government. A search has been authoritatively defined as occurring " 'when an expectation of privacy that society is prepared to consider reasonable is infringed.' " *United States v. Jacobsen*, 466 U.S. 705, 712, 104 S.Ct. 3296, 82 L.Ed.2d 530 (1984) (quoting *United States v. Jacobsen*, 466 U.S. 109, 113, 104 S.Ct. 1652, 80 L.Ed.2d 85 (1984)). The term "search" is thus not itself a helpful term on which to focus. A court's attention is directed to the "expectation of privacy" and society's view of the reasonableness of the expectation.

I start with the proposition that "[t]he sanctity of the home is not to be disputed." *Segura v. United States*, 468 U.S. 796, 810, 104 S.Ct. 3380, 82 L.Ed.2d 599 (1984). A search "inside a home without a warrant" is "presumptively unreasonable absent exigent circumstances." *Karo*, 468 U.S. at 715, 104 S.Ct. 3296. At the same time the Fourth Amendment "protects people, not places." *Katz v. United States*, 389 U.S. 347, 351, 88 S.Ct. 507, 19 L.Ed.2d 576 (1967). As a consequence of this axiom, a forbidden search can occur even when no trespass is involved. It is, therefore, not helpful to the government that the Agema reaches into the interior only by inference. An invasion of property is not necessary to trigger the protection of the Amendment. *See Katz*, 389 U.S. at 353, 88 S.Ct. 507.

I have no doubt that Kyllo did have an expectation of privacy as to what was going on in the interior of his house and that this expectation was infringed by the government's use of the Agema 210 although the machine itself never penetrated into the interior. The closest analogy is use of a telescope that, unknown to the homeowner, is able from a distance to see into his or her house and report what he or she is reading or writing. Such an enhancement of normal vision by technology, permitting the government to discern what is going on in the home, violates the Fourth Amendment. *See United States v. Taborda*, 635 F.2d 131, 139 (2d Cir.1980) (warrantless use of telescope to see objects not visible to the naked eye violates the Fourth Amendment). No principled difference exists between a machine capable of reading reflections of light that a telescope picks up and a machine reading the emissions of heat as does the Agema. In each case the amplification of the senses by technology defeats the homeowner's expectation of privacy. The government is not entitled to defeat this expectation by technological means. *See Karo*, 468 U.S. at 715, 104 S.Ct. 3296.

The court holds that the Agema 210 merely reads emissions off the roof. The court notes, reasonably enough, that there is no evidence that Kyllo had any expectation of privacy as to these emissions. The emissions have been treated as waste energy, comparable to the waste disposed of as garbage that the government is entitled to inspect without violating the Constitution. *See United States v. Robinson*, 62 F.3d 1325 (11th Cir.1995), *cert. denied*, 517 U.S. 1220, 116 S.Ct. 1848, 134 L.Ed.2d 949

(1996); *United States v. Myers*, 46 F.3d 668 (7th Cir.), *cert. denied*, 516 U.S. 879, 116 S.Ct. 213, 133 L.Ed.2d 144 (1995); *United States v. Pinson*, 24 F.3d 1056 (8th Cir.), *cert. denied*, 513 U.S. 1057, 115 S.Ct. 664, 130 L.Ed.2d 598 (1994).

This analogy fails because, unlike garbage which is purposely discarded, emissions of heat occur without conscious attention by the homeowner. *See United States v. Ishmael*, 48 F.3d 850, 854 (5th Cir.) (finding warrantless thermal imagery permissible but rejecting the "waste heat" analogy), *cert. denied*, 516 U.S. 818, 818, 116 S.Ct. 74, 75, 133 L.Ed.2d 34, 34 (1995). It is strange to focus on the homeowner's non-existent expectation as to emissions. The homeowner's expectation is directed to the privacy of the interior of his home. It is that expectation which the Fourth Amendment is intended to protect.

On behalf of the government, two other analogies need to be considered. If Kyllo started a fire in his fireplace there is no doubt the government could use the smoke rising from his chimney as a basis for securing a warrant if a fire in the house suggested the commission of a crime. If Kyllo was operating a methamphetamine laboratory in his home and the smell reached the nose of a policeman on the street, there would be probable cause to seek a warrant. *See United States v. Johns*, 948 F.2d 599, 603 (9th Cir.1991). The trouble with these two analogies is that they both depend on unaided human senses reading the signs from the house. In each the homeowner has no reasonable expectation that the signs will not be observed. Our case involves amplification of the senses by technology. That kind of amplification is critical as it defeats the homeowner's expectation. It is the effect on this expectation that makes the amplification impermissible.

Given that Kyllo does have an expectation of privacy as to the interior of his home, is society prepared to view it as reasonable? Here is the point at which the protection of the Fourth Amendment is in tension with the social desirability of suppressing crime wherever it is found. The Fourth Amendment is not intended to make the home a sanctuary for the commission of crime with impunity. It is intended to allow government intrusion into the home only in exigent circumstances or upon judicial approval of the intrusion. A different rule might be fashioned, but the present rule is that even a search to find probable cause for obtaining a warrant—even such a search which has as its object the ultimate obtaining of a magistrate's approval—cannot be conducted without violation of the Fourth Amendment. *See Karo*, 468 U.S. at 710, 104 S.Ct. 3296. Society has determined that it is reasonable for the home to be a citadel safe from warrantless inspection. *See Segura*, 468 U.S. at 810, 104 S.Ct. 3380.

It is argued that the several decisions by circuit courts already cited show society's disapproval of the expectation of privacy as to emission of heat. There are, however, cases in the contrary direction. Two state cases within this circuit, *State v. Siegal*, 281 Mont. 250, 934 P.2d 176 (1997), and *State v. Young*, 123 Wash.2d 173, 867 P.2d 593 (1994), have found thermal imaging to violate state constitutions. Two courts have held it violative of the Fourth Amendment. *See People v. Deutsch*, 44 Cal.App.4th 1224, 52 Cal.Rptr.2d 366 (1996); *United States v. Field*, 855 F.Supp. 1518 (W.D.Wis.1994). In the end what society is prepared to find reasonable must, for us, be determined by the most relevant analyses and analogies. To conclude that because this court holds the expectation unreasonable it is unreasonable is to argue in a circle.

The only Court of Appeals to consider this question and determine that the use of thermal imaging is unconstitutional was the Tenth Circuit in *United States v. Cusumano*, 67 F.3d 1497 (10th Cir.1995). The opinion was vacated on rehearing en banc on the ground that the court did not need to reach the thermal imaging question. *See United States v. Cusumano*, 83 F.3d 1247 (10th Cir.1996). Consequently, the decision does not have more than a hypothetical character, but it has been

APPENDIX B

NOT FOR PUBLICATION

FILED

DEC 14 1999

CATHY A. CATTERSON, CLERK
U.S. COURT OF APPEALS

UNITED STATES COURT OF APPEALS

FOR THE NINTH CIRCUIT

UNITED STATES OF AMERICA, Plaintiff-Appellee, v. DANNY LEE KYLLO, Defendant-Appellant.	No. 96-30333 D.C. No. CR-92-00051-1-HJF ORDER

Before: BRUNETTI, NOONAN, and HAWKINS, Circuit Judges.

Judges Brunetti and Hawkins have voted to deny the petition for rehearing and the petition for rehearing en banc. Judge Noonan has voted to grant the petition for rehearing and the petition for rehearing en banc.

The full court has been advised of the petition for rehearing en banc and no active judge has requested a vote on whether to rehear the matter en banc. Fed. R. App. P. 35.

The petition for rehearing and the petition for rehearing en banc are denied.

As we explained in *Charry Cubillos*, "[a]fter *Koon*, federal courts can no longer categorically proscribe a basis for departure-unless the Commission has proscribed, as a categorical matter, consideration of the factor." *Charry Cubillos*, 91 F.3d at 1344 (discussing *Koon v. United States*, 518 U.S. 81, 109, 116 S.Ct. 2035, 135 L.Ed.2d 392 (1996)). Of course this could not be said of the guidelines for drug and false statement offenses.

However, in this case, the crime itself assumes an alien who is deportable, and sentencing necessarily involves a defendant who is a deportable alien. A defendant cannot be guilty of violating § 1326(a) unless he has previously "been denied admission, excluded, deported, or removed" from the United States, *see* 8 U.S.C. § 1326(a)(1), yet this is the very status that Martinez-Ramos advances as grounds for a downward departure. All defendants found guilty of violating § 1326(a) will be deportable aliens, subject to the same sentencing constraints that apply to all other defendants found guilty of violating § 1326(a). Thus, unlike in *Charry Cubillos*, there is not even an arguable "need to avoid unwarranted sentence disparities among defendants with similar records who have been found guilty of similar conduct." 18 U.S.C. § 3553(a)(6). Likewise, the Sentencing Commission by definition must have factored deportable alien status into U.S.S.G. § 2L1.2, the guideline for a § 1326(a) offense, for the defendant's status as a deportable alien found in the United States without permission is the very thing being punished.

Accordingly we join the Sixth and Seventh Circuits in holding that deportable status may not be a ground for downward departure from the applicable guideline range for aliens who are deportable. *See United States v. Gonzalez-Portillo*, 121 F.3d 1122 (7th Cir.1997), *cert. denied*, — U.S. —, 118 S.Ct. 720, 139 L.Ed.2d 660 (1998); *United States v. Ebolum*, 72 F.3d 35 (6th Cir.1995).[3] In *Ebolum* as here, the defendant was found in the United States in violation of § 1326 and was sentenced under U.S.S.G. § 2L1.2. He also requested a downward departure based on his status as a deportable alien. The court reasoned:

> Absent any credible argument or evidence to the contrary, we must assume that the Sentencing Commission took deportable alien status into account when formulating a guideline that applies almost invariably to crimes, such as 8 U.S.C. § 1326, that may be committed only by aliens whose conduct makes them deportable. Therefore, the district court's determination that it could not depart downward on the basis of deportable alien status in this case was correct.

Ebolum, 72 F.3d at 38. Similarly in *Gonzalez-Portillo*, decided after *Koon*, the defendants were convicted of violating § 1326 and argued that their status as deportable aliens would lead to harsher conditions of confinement because they were disqualified from serving any portion of their sentences in minimum security institutions, half-way houses, community correction centers, or home confinement. Following *Ebolum*, the court noted that "[b]ecause deportable alien status is an inherent element of the crimes to which the guideline applies, this factor was clearly 'taken into consideration by the Sentencing Commission in formulating the guideline[ ]' (18 U.S.C. § 3553(b)) and was accounted for in the offense levels it established." *Gonzalez-Portillo*, 121 F.3d at 1124-25.

We agree that "deportability was certainly accounted for" in U.S.S.G. § 2L1.2. *Id.* at 1125, since all crimes covered by it involve an alien being found illegally in the United States, who is for that reason deportable. That being so, departure on account of deportable status for aliens convicted of § 1326 offenses fits squarely within *Koon*'s perimeters and is proscribed. The district court did not err in believing that it lacked discretion to depart downward on the basis of Martinez-Ramos's status as a deportable alien.

AFFIRMED IN PART, REVERSED AND REMANDED IN PART.

3. The First Circuit has also pointed out "that the Sentencing Commission was fully cognizant that virtually all alien criminal defendants, convicted under 8 U.S.C. § 1326(a) and sentenced pursuant to U.S.S.G. § 2L1.2, would be subjected to deportation. . . ." *United States v. Clase-Espinal*, 115 F.3d 1054, 1059 (1st Cir.), *cert. denied*, — U.S. —, 118 S.Ct. 384, 139 L.Ed.2d 299 (1997) (district court lacks authority to depart downward because defendant's stipulation to deportation did not constitute a mitigating circumstance not contemplated by the Commission).

1

UNITED STATES of America, Plaintiff-Appellee,

v.

Danny Lee KYLLO, Defendant-Appellant.

No. 96-30333.

United States Court of Appeals, Ninth Circuit.

Filed July 29, 1999

Before: BRUNETTI,[1] NOONAN, and HAWKINS, Circuit Judges.

The Opinion filed April 7, 1998 and appearing at 140 F.3d 1249 (9th Cir.1998), is withdrawn. The panel, being unanimously of the view that the issues are well framed by the briefs filed to date, will proceed to issue an opinion without further argument.

1. Judge Brunetti was drawn to replace the Honorable Robert R. Merhige, Jr., Senior United States District Judge for the Eastern District of Virginia, in this case.

2

Daniel Arvizu MORENO, Petitioner-Appellee,

v.

Terry L. STEWART; Attorney General for the State of Arizona, Respondents-Appellants.

No. 97-17238.

United States Court of Appeals, Ninth Circuit.

Filed July 29, 1999

Before: SNEED, TASHIMA, and SILVERMAN, Circuit Judges.

Prior report: 171 F.3d 658

The Opinion filed March 17, 1999, is withdrawn.[1]

3

Albert BINDER; Estelle Binder, in their individual capacities and on behalf of one or more classes of persons similarly situated, Plaintiffs-Appellants,

v.

Thomas GILLESPIE; Marie Mullen Gillespie; T. Gordon Sim; Diane L. Karban; John A. Good, Defendants,

1. A separate unpublished order has been filed this date dismissing the appeal for lack of jurisdiction.

APPENDIX C

APPENDIX D

FILED

JAN 12 1999

CATHY A. CATTERSON, CLERK
U.S. COURT OF APPEALS

NOT FOR PUBLICATION

UNITED STATES COURT OF APPEALS

FOR THE NINTH CIRCUIT

UNITED STATES OF AMERICA,	)	No. 96-30333
	)	
Plaintiff-Appellee,	)	D.C. No. CR-92-00051-1-HJF
	)	
v.	)	
	)	ORDER
DANNY LEE KYLLO,	)	
	)	
Defendant-Appellant.	)	

BEFORE: BRUNETTI,[1] NOONAN and HAWKINS, Circuit Judges.

A majority of the panel has voted to grant the petition for rehearing. Judge Noonan has voted to deny the petition. The date, time and location of the rehearing will be announced at a later date.

RECEIVED

JAN 14 1999

[1] Judge Brunetti has been drawn to replace the Honorable Robert R. Merhige, Jr., Senior United States District Judge for the Eastern District of Virginia, in this case.

Carol DeDeo, Associate Solicitor, U.S. Department of Labor, Washington, DC, for respondent Director, Office of Workers Compensation Programs.

Petitions for Review of an Order of the Benefits Review Board. BRB No. 94-2840, OWCP No. 05-0079610.

Before: SNEED, KOZINSKI and THOMPSON, Circuit Judges.

PER CURIAM:

Thomas W. McNutt is disabled. The issue we consider in this appeal is whether a $100 [illegible]n paid to McNutt while working in [illegible]a should be included as wages in calculating his disability benefits under section 902(13) of the Longshore & Harbor Worker's Compensation Act, ("LHWCA"), 33 U.S.C. §§ 901-960.

Both McNutt and his employer, Superior Marine Inc., appeal the decision of the Benefits Review Board's affirmance of an Administrative Law Judge's award of benefits under the LHWCA. The ALJ held that McNutt's per diem was an "advantage" and therefore was includable as part of his average weekly wage for purposes of calculating benefits under 33 U.S.C. § 902(13). On appeal, McNutt contends the ALJ erred by not computing his per diem based on the amount that a comparable employee would have received for an entire 52-week period. Superior Marine Inc., in its appeal, argues that McNutt's per diem should not have been [illegible]ed as "wages" in calculating benefits [illegible]he LHWCA. Both appeals turn on [illegible]r the per diem allowance should be included as "wages" for purposes of calculating benefits under 33 U.S.C. § 902(13).

"The term 'wages' means the money rate at which the service rendered by an employee is compensated by an employer ... including the reasonable value of any advantage which is received from the employer *and included for purposes of any withholding of tax* under subtitle C of the Internal Revenue Code of 1954 (relating to employment taxes)." 33 U.S.C. § 902(13) (emphasis added).

In *Wausau Ins. Cos. v. Director, OWCP*, 114 F.3d 120, 121 (9th Cir.1997), we concluded, "[Section 902(13)] defers to the IRS criteria for deciding whether non-monetary compensation counts as wages. If it is not money, or an 'advantage' subject to withholding, it is not included." In *Wausau*, the disabled employee had received meals and lodging from the employer. *Id.* We concluded these benefits were not wages because they were not income under 26 U.S.C. § 119(a). We noted that this section of the Internal Revenue Code provides that "the value of meals and lodging provided by an employer is income unless the meals and lodging are 'furnished ... for the convenience of the employer' and '(1) in the case of meals, the meals are furnished on the business premises of the employer, or (2) in the case of lodging, the employee is required to accept such lodging on the business premises of his employer as a condition of his employment.' 26 U.S.C. § 119(a)." *Wausau*, 114 F.3d at 121.

[1] In the present case, McNutt did not receive meals and lodging. He received money from his employer in the sum of $100.00 per day. From this per diem, he could pay for his own food and lodging. If he could hold these expenses to under $100.00 per day, he could keep the difference. The ALJ held that this per diem arrangement was an "advantage" under 33 U.S.C. § 902(13). We agree. The "advantage," however, is not a "wage" within the meaning of 33 U.S.C. § 902(13). It is not a "wage" under that section, because, as the parties agree, it is not subject to withholding under the Internal Revenue Code. Therefore, consistent with *Wausau*, we hold that McNutt's per diem is not includable as wages for purposes of determining his benefits under 33 U.S.C. § 902(13).

The parties agree that McNutt's average weekly wage, exclusive of the $100.00 per diem, was $615.82. Accordingly, we remand to the Benefits Review Board to enter a finding that this was the amount of McNutt's average weekly wage.

[2] We must also decide whether the ALJ erred by failing to make specific findings regarding the liability of Superior Marine Inc. and Commercial Union Insurance Company for proposed medical treatment to McNutt's left shoulder. In conducting our review, we must accept the ALJ's findings if they are supported by substantial evidence. *See Container Stevedoring Co. v. Director, OWCP*, 935 F.2d 1544, 1546 (9th Cir.1991).

At the hearing before the ALJ, both parties submitted evidence and argument on the issue of whether McNutt's present need for medical treatment of his left shoulder was the result of failure to cooperate with medical treatment and, therefore, not related to McNutt's work injury. The ALJ invited the parties to submit supplemental briefing on the issue. The record demonstrates that neither party did so. After the hearing, Superior Marine argued that the causation issue had not been actually litigated. The ALJ, in his "Decision and Order," stated that the "shoulder issue [was] ripe for adjudication." The ALJ did not specifically address the causation issue but concluded, without analysis, that Superior Marine remained liable for medical benefits "in connection with injuries ... to claimant's back and left shoulder, the reasonableness and necessity for which remains under the ongoing supervision of the District Director."

[3] Because we "cannot substitute [our] views for the ALJ's views or engage in de novo review of the evidence," we remand to allow the ALJ to make specific findings regarding causation. *See Container Stevedoring Co.*, 935 F.2d at 1546.[1]

REVERSED and REMANDED.

BEST AVAILABLE COPY

UNITED STATES of America,
Plaintiff-Appellee,
v.
Danny Lee KYLLO, Defendant-Appellant.
No. 96-30333.

United States Court of Appeals,
Ninth Circuit.

Argued and Submitted Nov. 5, 1997.
Decided April 7, 1998.

Following denial of his motion to suppress evidence obtained in search of his residence, defendant was convicted in the United States District Court for the District of Oregon, Helen J. Frye, J., 809 F.Supp. 787, of manufacturing marijuana. Defendant appealed. The Court of Appeals, 37 F.3d 526, vacated conviction and remanded. The District Court, 1996 WL 125594, again denied defendant's motion to suppress. Defendant appealed. The Court of Appeals, Merhige, Senior District Judge, sitting by designation, held, as matter of first impression, that warrantless use of thermal imager to scan home in order to detect marijuana growing operation violated Fourth Amendment.

Reversed and remanded.

Hawkins, Circuit Judge, dissented and filed opinion.

1. Criminal Law ⇐394.4(6)

District court must suppress evidence seized under a warrant when an affiant has knowingly or recklessly included false information in the affidavit. U.S.C.A. Const. Amend. 4.

2. Criminal Law ⇐1158(2)

District court's finding that statements in affidavit in support of search warrant were not made with reckless disregard for the truth are reviewed under the clearly erroneous standard. U.S.C.A. Const. Amend. 4.

3. Drugs and Narcotics ⇐188(3)

Agent for Bureau of Land Management did not knowingly or recklessly include false information in affidavit in support of search warrant, when he omitted fact that defendant and his former wife, with whom defendant was allegedly involved in drug activity, were divorced; no evidence was presented that agent or state law enforcement officers who supplied him with information knew of divorce. U.S.C.A. Const. Amend. 4.

4. Drugs and Narcotics ⇐185(1)

Warrantless use of thermal imager to scan defendant's home in order to detect marijuana growing operation violated Fourth Amendment; defendant manifested subjective expectation of privacy by moving his agricultural pursuits inside his house, and

1. We deny McNutt's request for attorney's fees

APPENDIX E

[3] In light of the evidence presented at the suppression hearing, it was not clearly erroneous for the district court to find that Elliott's omission from the Affidavit of the fact that Kyllo and Luanne were divorced was not knowingly false or made in reckless disregard for the truth. No evidence was presented at the hearing that either Elliott or the Oregon State law enforcement officials who supplied him information knew that Kyllo and Luanne were divorced. Furthermore, there was no evidence presented showing that their failure to discover and report the fact of Kyllo's divorce was reckless. Thus, [illegible]rtion of Elliott's affidavit relating to [illegible] relationship to Luanne was properly considered by the magistrate judge in determining whether there was probable cause to issue a warrant.

After holding the evidentiary hearing, the district court found that Elliott did not knowingly or recklessly omit information about Kyllo's divorce from the Affidavit. Regarding the Agema, the district court found that (1) it revealed no intimate details of Kyllo's home, (2) it did not intrude on the privacy of persons inside Kyllo's home, (3) it could not penetrate walls or windows or reveal human activities or conversations, and (4) it "recorded only the heat being emitted from the home." *United States v. Kyllo*, No. CR 92-51-FR (D.Or. Mar. 15, 1996). Based on its factual findings, the district court concluded that the warrantless search of Kyllo's home with the Agema was permissible and that there was probable cause to issue the warrant to search Kyllo's home.

On appeal, Kyllo argues that the use of the thermal imaging scanner to measure the heat emanating from his house was a search within the meaning of the Fourth Amendment and, therefore, required a warrant to be valid. As a result, Kyllo argues that the search was unconstitutional, rendering the search warrant based on the results of Agema's measurements invalid. Kyllo further argues that the district court erred in finding that Elliott's omission from the Affidavit of the fact that Kyllo and Luanne were divorced was not knowingly false or made in reckless disregard for the truth. Kyllo contends that neither the findings from the warrantless search with the Agema nor Elliott's omissions from the Affidavit should have been considered by the magistrate in determining whether there was probable cause to issue the search warrant. Thus, Kyllo argues, the evidence obtained during the search should be suppressed.

II. Warrantless Search with Thermal Imaging Device

[4–6] Kyllo first argues that the warrantless use of a thermal imaging device to scan his home constituted a "search" within the meaning of the Fourth Amendment, and that the fruits of this warrantless search must therefore be suppressed. The validity of a warrantless search is reviewed *de novo*. *See United States v. Van Poyck*, 77 F.3d 285, 290 (9th Cir.), *cert. denied*, — U.S. —, 117 S.Ct. 276, 136 L.Ed.2d 199 (1996). The district court's findings of fact on the capabilities of the Agema are reviewed for clear error. *See Ornelas v. United States*, 517 U.S. 690, 698–700, 116 S.Ct. 1657, 1663, 134 L.Ed.2d 911 (1996); *United States v. Hernandez*, 27 F.3d 1403, 1406 (9th Cir.1994).

[7] The Fourth Amendment provides that "[t]he right of the people to be secure in their persons, houses, papers, and other effects, against unreasonable searches and seizures, shall not be violated." U.S. Const. amend. IV. We must apply the two-prong test enunciated by the Supreme Court in *Katz* to determine whether a warrantless search violated a defendant's legitimate expectation of privacy: the defendant must have a subjective expectation of privacy, and that expectation must be one that society is prepared to acknowledge as reasonable. *See Katz v. United States*, 389 U.S. 347, 361, 88 S.Ct. 507, 516–17, 19 L.Ed.2d 576 (Harlan, J., concurring); *see also California v. Ciraolo*, 476 U.S. 207, 211, 106 S.Ct. 1809, 1811–12, 90 L.Ed.2d 210 (1986). We conclude that Kyllo had a subjective expectation of privacy that activities conducted within his home would be private. Although the Supreme Court ultimately held that the search conducted in *Ciraolo* was constitutional, it first concluded that the defendant, who enclosed his backyard marijuana crop with a double fence, "ha[d] met the test of manifesting his own subjective intent and desire to maintain privacy as to his unlawful agricultural pursuits."

Ciraolo, 476 U.S. at 211, 106 S.Ct. at 1811–12. Surely a defendant, such as Kyllo, who moves his agricultural pursuits inside his house has similarly manifested a subjective expectation of privacy in those activities. *See United States v. Ishmael*, 48 F.3d 850, 854 (5th Cir.1995).

In cases involving the use of thermal imagers, other circuits have framed the inquiry in the first prong of *Katz* differently. Those circuits have analogized the excess heat measured by a thermal imager to the excess trash left on the curb, and have asked whether the defendant has manifested a subjective expectation of privacy in the "waste heat" emanating from their homes. Those courts have held, citing *California v. Greenwood*, 486 U.S. 35, 108 S.Ct. 1625, 100 L.Ed.2d 30 (1988), that such defendants have failed to manifest a subjective expectation of privacy in the excess heat. *See United States v. Robinson*, 62 F.3d 1325, 1328–29 (11th Cir. 1995); *United States v. Myers*, 46 F.3d 668, 669–70 (7th Cir.1995); *United States v. Pinson*, 24 F.3d 1056, 1058 (8th Cir.1994). We respectfully reject the "heat waste" analogy. The purpose and utility of the thermal imager is to reveal the heat signatures of various objects and activities occurring inside a structure. The pertinent inquiry is not, therefore, whether the Defendants retain an expectation of privacy in the 'waste heat' radiated from their home but, rather, whether they possess an expectation of privacy in the heat signatures of the activities, intimate or otherwise, that they pursue within their home." *United States v. Cusumano*, 67 F.3d 1497, 1502 (10th Cir.1996), *vacated on other grounds*, 83 F.3d 1247 (10th Cir.1996); *see also Katz*, 389 U.S. at 353, 88 S.Ct. at 512 (holding the defendant had exhibited a subjective expectation of privacy although he had not taken every precaution against electronic eavesdropping); *Ishmael* 48 F.3d at 854–55 (holding warrantless search with thermal imager constitutional but rejecting the "waste heat" analogy).

[8, 9] We now must address whether Kyllo's subjective expectation of privacy regarding the heat signatures of the activities within his home is one that society is prepared to acknowledge as reasonable. As the Supreme Court has stated, "[a]t the risk of belaboring the obvious, . . . [the individual's expectation in the privacy of a residence] is plainly one that society is prepared to recognize as reasonable." *United States v. Karo*, 468 U.S. 705, 714, 104 S.Ct. 3296, 3303, 82 L.Ed.2d 530 (1984). The Supreme Court has repeatedly emphasized that "[a]t the very core [of the Fourth Amendment] stands the right of a man to retreat into his own home and there be free from unreasonable governmental intrusion." *Silverman v. United States*, 365 U.S. 505, 511, 81 S.Ct. 679, 683, 5 L.Ed.2d 734 (1961). Because of the respect for the sanctity of the home, "the Fourth Amendment has drawn a firm line at the entrance to the house. Absent exigent circumstances, that threshold may not reasonably be crossed without a warrant." *Payton v. New York*, 445 U.S. 573, 590, 100 S.Ct. 1371, 1382, 63 L.Ed.2d 639 (1980). Therefore, warrantless searches and seizures in the home are "presumptively unreasonable." *Id.*

Other circuits that have considered the warrantless use of thermal imagers have held that because of the technical inadequacies of the thermal imager used in their respective cases, the scan of defendants' homes did not reveal enough intimate details to raise constitutional concerns, all citing *Dow Chemical v. United States*, 476 U.S. 227, 106 S.Ct. 1819, 90 L.Ed.2d 226 (1986). *See Robinson*, 62 F.3d at 1328 (11th Cir.1995); *Ishmael*, 48 F.3d at 854 (5th Cir.1995); *Myers*, 46 F.3d at 669–70 (7th Cir.1995); *Pinson*, 24 F.3d at 1059 (8th Cir.1994); *contra Cusumano*, 67 F.3d at 1504 (10th Cir.1995). We too are concerned about the nature of the information that the thermal imager used to scan Kyllo's home is able to reveal. As we stated on remand,

> [the *Katz*] inquiry cannot be conducted in the abstract. We must have some gauge of the intrusiveness of the thermal imaging device, which depends on the quality and the degree of detail of information that it can glean. For example, our analysis will be affected by whether, on the one extreme, this device can detect sexual activity in the bedroom, as Kyllo's expert suggests, or, at the other extreme, whether it can only detect hot spots where heat is escaping from a structure.

use of thermal imager infringed upon expectation that society deems reasonable in that, even assuming it could not reveal intimate activities in bedroom, it could identify use of showers and bathtubs, ovens, washers and dryers, and any other household appliance emitting heat. U.S.C.A. Const.Amend. 4.

See publication Words and Phrases for other judicial constructions and definitions.

5. Searches and Seizures ⇐200

Validity of warrantless search is reviewed de novo. U.S.C.A. Const.Amend. 4.

[illegible]inal Law ⇐1158(1)

[illegible]istrict court's findings of fact are reviewed for clear error.

7. Searches and Seizures ⇐26

For warrantless search to violate a defendant's legitimate expectation of privacy, the defendant must have a subjective expectation of privacy, and that expectation must be one that society is prepared to acknowledge as reasonable. U.S.C.A. Const.Amend. 4.

8. Searches and Seizures ⇐26

Individual's expectation in the privacy of a residence is one that society is prepared to recognize as reasonable, as required for warrantless search to violate Fourth Amendment. U.S.C.A. Const.Amend. 4.

9. Searches and Seizures ⇐25.1

Warrantless searches and seizures in the home are presumptively unreasonable. U.S.C.A. Const.Amend. 4.

10. [illegible]arches and Seizures ⇐26

Even the routine and trivial activities conducted in our homes are sufficiently intimate to give rise to Fourth Amendment violation if observed by law enforcement without a warrant. U.S.C.A. Const.Amend. 4.

Kenneth Lerner, Portland, Oregon, for defendant-appellant.

Kristine Olson, United States Attorney, District of Oregon; Robert R. Thomson, Assistant United States Attorney, Medford, Oregon, for plaintiff-appellee.

David K. Allen, American Civil Liberties Union of Oregon, Inc., Portland, Oregon, for amicus.

Appeal from the United States District Court for the District of Oregon; Helen J. Frye, District Judge, Presiding. D.C. No. CR-92-00051-1-HJF.

Before: NOONAN and HAWKINS, Circuit Judges, and MERHIGE, * District Judge.

Opinion by Judge MERHIGE; Dissent by Judge HAWKINS.

MERHIGE, District Judge:

Based on the readings from a thermal imager, the observation of unusually high power usage at Defendant-Appellant Danny Lee Kyllo's home, information provided by an informant, and other circumstantial evidence, federal law enforcement officers obtained a warrant to search the premises of Danny Lee Kyllo ("Kyllo"). The officers executed the warrant and discovered an indoor marijuana growing operation, weapons, and drug paraphernalia. After being indicted, Kyllo moved to suppress all the evidence obtained in the search of his residence. The district court denied his motion. We vacated that conviction and remanded for further proceedings. On remand, the district court again denied Kyllo's motion to suppress. This appeal presents an issue of first impression in this circuit, namely whether thermal imaging scanning is a search within the meaning of the Fourth Amendment. We hold that thermal imaging scanning is a search within the meaning of the Fourth Amendment.

I. Factual Background

While investigating a suspected marijuana growing and distribution operation, United States Bureau of Land Management Agent William Elliott ("Elliott") discovered information suggesting Kyllo's involvement. Elliott contacted Oregon state law enforcement officers who provided him with additional

information, including the following: that Kyllo lived with his wife, Luanne Kyllo ("Luanne"), in one unit of a triplex in Florence, Oregon; that the triplex was occupied by other persons who were suspects in the investigation; that a car registered to Kyllo and Luanne at the triplex address was parked outside the triplex; that Kyllo had allegedly told a police informant that Luanne and he could supply the informant with marijuana; and that the previous month, Luanne had been arrested for delivery and possession of a controlled substance.

Elliott subpoenaed Kyllo's utility records. Using a chart for estimating average electricity use, Elliott concluded that Kyllo's electricity use was abnormally high. At Elliott's request, Staff Sergeant Daniel Haas ("Haas") of the Oregon National Guard examined Kyllo's home using an Agema Thermovision 210 thermal imaging device (the "Agema"). A thermal imager operates by observing and recording the differential heat patterns emanating from various objects within its view. The results of the measure of these differential heat patterns are then displayed on a viewfinder on top of the instrument which indicates the amount of heat emitted by objects by shading the area around the object a lighter or darker color. As the Tenth Circuit explained,

> [a]ctivities that generate a significant amount of heat . . . produce a heat "signature" that the imager can detect. Under optimal conditions—viewing through an open window into a darkened room, for example—the imager (or one much like it) might well be able to resolve these heat signatures into somewhat indistinct images. The utility of the machine depends therefore not on the inevitable and ubiquitous phenomenon of heat loss but on the presence of distinguishable heat signatures inside the structure.

United States v. Cusumano, 67 F.3d 1497, 1501 (10th Cir.1995), *vacated on other grounds*, 83 F.3d 1247 (10th Cir.1996).

Haas' search revealed what he considered abnormally high levels of heat emanating from Kyllo's home. Elliott concluded that this heat signature indicated the presence of high intensity lights used to grow marijuana indoors. Elliott presented the information he had gathered about Kyllo in an affidavit (the "Affidavit") to a federal magistrate judge for the United States District Court for the District of Oregon and requested a search warrant for Kyllo's home. The magistrate issued the warrant. Elliott searched Kyllo's home. He discovered an indoor marijuana growing operation and seized a number of items, including marijuana, weapons, and drug paraphernalia.

Kyllo was indicted on one count of the manufacture of marijuana in violation of 21 U.S.C. § 841(a)(1). After holding a suppression hearing, the district court denied Kyllo's motion. Kyllo pled guilty and was sentenced to 63 months in custody. Kyllo appealed the district court's denial of his motion to suppress the evidence to this Court. In a memorandum disposition, this Court found that, while the portion of the Affidavit relating to Kyllo's electricity use was false and misleading, the district court was not clearly erroneous in concluding that the false statements were not knowingly or recklessly made. *See United States v. Kyllo*, 37 F.3d 526 (9th Cir.1994). Thus, the portion of Elliott's affidavit relating to Kyllo's electricity use was properly considered by the magistrate judge in determining whether there was probable cause to issue a warrant.

[1, 2] This Court then remanded the case to the district court to hold an evidentiary hearing on the capabilities of the Agema and on whether Elliott knowingly or recklessly omitted from the Affidavit the fact that Kyllo and Luanne were divorced. "A district court must suppress evidence seized under a warrant when an affiant has knowingly or recklessly included false information in the affidavit." *United States v. Dozier*, 844 F.2d 701, 705 (9th Cir.), *cert. denied*, 488 U.S. 927, 109 S.Ct. 312, 102 L.Ed.2d 331 (1988). The district court found that, while Elliott's omission from the Affidavit of the fact that Kyllo and Luanne were divorced was misleading, it was not knowingly false or made in reckless disregard for the truth. *See United States v. Kyllo*, No. Cr. 92-51-FR, 1996 WL 125594 (D.Or. Mar. 15, 1996). We review the district court's finding that these statements were not made with reckless regard for the truth under the clearly erroneous standard. *See Dozier*, 844 F.2d at 705.

* Honorable Robert R. Merhige, Jr., Senior United States District Judge for the Eastern District of Virginia, sitting by designation

APPENDIX F

United States v. Kyllo, 37 F.3d 526, 530–31 (9th Cir.1994).

In the evidentiary hearing conducted on remand, Kyllo presented considerable evidence to the district court about the capabilities of near-end thermal imagers such as the Agema Thermovision 210. Carlos Ghiglotty presented a videotape he had created for the district court which clearly demonstrated the ability of the Agema and other near short wave infrared cameras to see through glass. Mr. Ghiglotty is president of Infrared Technologies, a company that does testing of the ations and capabilites of infrared cam- and tests ways infrared cameras can be applied in the field, and has been involved in thermal imaging and infrared technology for fourteen years. The videotape demonstrated that an Agema camera used in the dark to scan a car with tinted, closed windows clearly showed a person waving inside the car. The videotape also depicted the image displayed on the Agema which revealed a man standing inside a glass door of a house, and showed details such as his movements to open the door, and his hand waving. Mr. Ghiglotty testified that this was a common capability among near-end thermal imagers such as the Agema.

Bill Martin, the director of sales for Flir Systems Incorporated which manufactures infrared imaging equipment, testified for the government. Mr. Martin had previously worked for the Agema company, and the company had provided Mr. Martin extensive ng in infrared technology, including c training on the Agema Thermovision .... (T-2, 24). Mr. Martin admitted that if a window was open and it was dark in the room, any thermal imager could detect activity through the opening. (T-2, 100). He furthermore stated that the imager could "see" people behind curtains if they were very close to the window, and could reveal people embracing if the window was open and it was dark out. Mr. Martin also testified that thermal imagers have physiology applications, as they can detect subsurface problems in the human body.

The record also contains a brochure published by the Agema company describing the capabilities of an Agema Thermovision 210: "Sensitive to temperature differences as small as 0.9 F, the Thermovision 210 can detect and delineate objects or persons in complete darkness, or under natural cover, as far away as 1500 feet. Operations can be conducted in any level of ambient light and at air temperatures from 14 to 131 F. Even at that distance ... the rugged 210 can easily distinguish between a domestic animal and a human being."

We conclude that the details unveiled by a thermal imager are sufficiently "intimate" to give rise to a Fourth Amendment violation. Although the Tenth Circuit's opinion in *Cusumano* was later vacated on rehearing en banc on other grounds, we agree with its initial conclusion that

> [o]ur fellow circuits have, we think, misapprehended the most pernicious of the device's capabilities. The machine intrudes upon the privacy of the home not because it records white spots on a dark background but rather because the interpretation of that data allows the government to monitor those domestic activities that generate a significant amount of heat. Thus, while the imager cannot reproduce images or sounds, it nonetheless strips the sanctuary of the home of one vital dimension of its security: 'the right to be let alone' from the arbitrary and discretionary monitoring of our actions by government officials.

United States v. Cusumano, 67 F.3d 1497, 1504 (10th Cir.1996), *vacated on other grounds*, 83 F.3d 1247 (10th Cir.1996). It is not disputed whether the Agema 210 could reveal details such as intimate activities in a bedroom. According to the manufacturer, the imager used in this case is sensitive to temperature differences as small as 0.9 F. As the court noted in *Cusumano*, it would not be difficult to determine the origin of two commingled objects emitting heat in a bedroom at night. *Id.* at 1504. Even assuming that the Agema, apparently a relatively unsophisticated thermal imager, is unable to reveal such intimate details, technology improves at a rapid pace, and much more powerful and sophisticated thermal imagers are being developed which are increasingly able to reveal the intimacies that we have heretofore trusted take place in private absent a valid search warrant legitimizing their observation.

[10] Furthermore, even if a thermal imager does not reveal details such as sexual activity in a bedroom, with a basic understanding of the layout of a home, a thermal imager could identify a variety of daily activities conducted in homes across America: use of showers and bathtubs, ovens, washers and dryers, and any other household appliance that emits heat. *See United States v. Field*, 855 F.Supp. 1518, 1519 (W.D.Wis.1994) (stating that a thermal imager had detected the presence of a dehumidifier in use in a closet). Even the routine and trivial activities conducted in our homes are sufficiently "intimate" as to give rise to Fourth Amendment violation if observed by law enforcement without a warrant. *Compare Arizona v. Hicks*, 480 U.S. 321, 325, 107 S.Ct. 1149, 1152–53, 94 L.Ed.2d 347 (1987) ("It matters not that the search uncovered nothing of any great personal value to respondent.... A search is a search, even if it happens to disclose nothing but the bottom of a turntable.") and *United States v. Karo*, 468 U.S. 705, 104 S.Ct. 3296, 82 L.Ed.2d 530 (1984) (holding that revelation of a single detail about the interior of the home, whether or not the beeper placed in can of ether was still inside the home, was sufficient to violate the Fourth Amendment) with *Florida v. Riley*, 488 U.S. 445, 452, 109 S.Ct. 693, 697, 102 L.Ed.2d 835 (1989) (plurality decision) (visual surveillance of interior of greenhouse revealed "no intimate details connected with the use of the home") (dicta) and *Dow Chemical*, 476 U.S. at 237–39, 106 S.Ct. at 1826–27 (surveillance by camera revealing outlines of commercial buildings did not disclose intimate details of the home). We therefore conclude that the use of a thermal imager to observe heat emitted from various objects within the home infringes upon an expectation of privacy that society clearly deems reasonable.

Because scanning with a thermal imager without a warrant violates the Fourth Amendment, the Agema readings should not have been considered by the magistrate judge. However, the district court did not consider whether the information provided to the magistrate was sufficient to sustain a search warrant without the addition of the readings from the thermal imager. Therefore, we remand for the district court to make that determination. On remand, the district court should be cognizant of the Court's holdings that the portions of Elliott's affidavit relating to Kyllo's electricity use and his relationship to Luanne were properly considered by the magistrate judge in determining whether there was probable cause to issue a warrant.

REVERSED and REMANDED.

HAWKINS, Circuit Judge, dissenting:

My colleagues have made the best case imaginable for the proposition that the use of a thermal imaging device constitutes a search within the meaning of the Fourth Amendment. I am not persuaded.

A search, whether of a home, a car, or a body, is, at bottom, an intrusion; a nonconsensual invasion of protected space. Whatever its Star Wars capabilities, the thermal imaging device employed here intruded into nothing. Rather, it measured the heat emanating from and on the outside of a house. Nor did law enforcement randomly choose its choice of targets: the agents employing the device were alerted to Kyllo's house because of its extraordinary use of electricity, a use consistent with indoor marijuana cultivation.

I would follow the lead of our sister circuits and hold that the use of thermal imaging technology does not constitute a search under contemporary Fourth Amendment standards.

Wayne SLOAN, Plaintiff-Appellant,

v.

Togo WEST, Jr., officially as Secretary of the Army; Office of Personnel Management, Defendants-Appellees.

No. 96-16830.

United States Court of Appeals, Ninth Circuit.

Argued and Submitted Nov. 6, 1997.

Decided April 7, 1998.

Federal employee appealed decision of Merit Systems Protection Board (MSPB)

marijuana in violation of 21 U.S.C. § 841(a)(1) and sentenced to 63 months. Before trial, Kyllo filed a motion to suppress all the evidence obtained in a search of his residence. The district court denied his motion. We vacate this conviction and remand for further proceedings.

I

Factual Background

In 1990, a law enforcement task force began investigating Sam Shook for the crime of cor[illegible]ng to grow and distribute marijuana. In [illegible]991, four search warrants were issu[illegible] executed by the task force. As a result of evidence obtained from these searches, the task force began to focus on Sam Shook's daughter, Tova. On January 16, 1992, Special Agent Elliott took Sergeant Daniel Haas of the Oregon National Guard to the respective homes of Danny Kyllo and Tova Shook, where Haas used a thermal imaging device to detect the level of heat within the homes. Special Agent Elliott submitted an affidavit stating that the level of power usage at Kyllo's residence was indicative of drug manufacturing and that Kyllo's wife had been recently arrested for possession and delivery of a controlled substance. Based on this affidavit, a magistrate issued a warrant to search Kyllo's residence.

Upon execution of the search warrant at Kyllo's residence, law enforcement officers found an indoor marijuana grow involving [illegible]an one hundred marijuana plants. [illegible]nuary 20, 1992, a federal grand jury indicted Kyllo for the crime of manufacturing marijuana based on the evidence located in his residence.

Kyllo filed a motion to suppress evidence on two theories. First, he claimed that the affidavit filed to secure the search warrant manifested a reckless disregard for the truth by including false information about the power usage levels at his home, and by omitting material information about his marital status. Second, he claimed that the use of a thermal imaging device to gather information from his home constituted a "search", which was conducted without a warrant in violation of the Fourth Amendment. The district court granted Kyllo a hearing to determine the veracity of the statements made before the magistrate, but limited its scope to the question of whether the statements about power usage at Kyllo's residence that were used to obtain the search warrant were submitted with reckless disregard for the truth. After conducting this hearing, the district court rejected both of Kyllo's theories of suppression and denied the motion.

II

The Search Warrant

A. Power Usage

Kyllo claims that Special Agent Elliott made statements in his affidavit before the magistrate about the power usage at Kyllo's residence with reckless disregard for the truth. To establish probable cause, Special Agent Elliott stated in his affidavit that the electricity consumption at Kyllo's residence was indicative of a marijuana grow operation. He based his claim of overconsumption on a spreadsheet that lists average monthly electricity bills for single family homes as a function of residence size. It is undisputed, however, that Elliott's use of the spreadsheet was false and misleading.[1]

[1] "A district court must suppress evidence seized under a warrant when an affiant has knowingly or recklessly included false information in the affidavit." *United States v. Dozier*, 844 F.2d 701, 705 (9th Cir.), *cert. denied*, 488 U.S. 927, 109 S.Ct. 312, 102 L.Ed.2d 331 (1988). In the absence of evidence that Elliott *knowingly* misused the spreadsheet, the issue is whether his mistakes constitute *reckless* or merely *negligent* disregard for the truth. *See United States v. Davis*, 714 F.2d 896 (9th Cir.1983). The district court found that Elliott did not act recklessly.[2] We review the district court's finding that these statements were not made with reckless disregard for the truth under the clearly erroneous standard. *Dozier*, 844 F.2d at 705.

1. He erroneously claimed that the spreadsheet was an *official* Portland General Electric Company document when it was not. He erroneously claimed that the spreadsheet listed "appropriate" or "maximum" power usage when it listed only "average" usage. Finally, he erroneously claimed that Kyllo was using too much electricity on the incorrect assumption that power consumption would decrease linearly with the square footage of the residence.

A comparison between the facts of this case and the facts of *Dozier* shows that the district court's finding in this case is not clearly erroneous. In *Dozier*, the affiant stated that the suspect had been convicted of multiple drug violations, when in fact, the suspect had been convicted of only one violation fifteen years ago as a juvenile, and that conviction had been set aside under state law. The affiant's explanation was that he did not know how to read the rap sheet correctly. The affiant also alleged that cars on the suspect's property belonged to certain persons although the affiant had earlier performed a DMV search that showed that the cars did not belong to those persons. *See Dozier*, 844 F.2d at 706. On these facts, we held that it was not clearly erroneous for the district court to find that the false statements arose from negligence rather than recklessness.

If the district court's finding based on the evidence in *Dozier* was not clearly erroneous, then neither was the court's finding in this case. Here, Elliott relied on a spreadsheet he received from the head of the Regional Crime Narcotics Enforcement Team, who in turn received it unofficially from a PGE employee. In addition, Elliott had used the spreadsheet "in a number of prior cases to successfully predict" marijuana grow operations. *See id.* In light of these facts, it was not clearly erroneous for the district court to find that the mistakes Elliott made in characterizing and applying the chart did not rise to the level of *reckless* disregard for the truth.

B. Marital Status

Kyllo claims that the district court erred in refusing to hold a *Franks* hearing on the issue of whether Special Agent Elliott omitted statements about Kyllo's marital status with reckless disregard for the truth. In his affidavit, Elliott stated:

> Det. Dorman told me that he was aware that on 12-06-90, Danny Kyllo's wife, Luanne Kyllo, was arrested for delivery and possession of a controlled substance. A check with DMV revealed that Danny Kyllo and Luanne Kyllo had a 1972 Datsun [illegible] which was registered at [Danny Kyllo's address].

E.R. at 51. While no statement in this paragraph is false, Elliott omitted the following uncontested facts: at the time of Luanne Kyllo's arrest, Luanne was separated from Danny Kyllo; she was living in a different state, California; and, she was using her maiden name. Although these facts appear in Detective Dorman's police report, Elliott did not examine the report itself and simply relied on Dorman's oral recounting of the facts.

Kyllo argued to the district court that Elliott's failure to check Dorman's report reveals a reckless disregard for the truth. Kyllo requested that this issue be considered in the district court's *Franks* hearing, but the court refused. *See Franks v. Delaware*, 438 U.S. 154, 98 S.Ct. 2674, 57 L.Ed.2d 667 (1978). We review *de novo*. *See United States v. Homick*, 964 F.2d 899, 901 (9th Cir.1992).

[2] To be entitled to a *Franks* hearing on this issue, Kyllo must first make a substantial preliminary showing that the affidavit contained a misleading omission and that the omission resulted from a deliberate or reckless disregard of the truth. Second, he must demonstrate that had there been no omission, the affidavit would have been insufficient to establish probable cause. *See United States v. Chesher*, 678 F.2d 1353, 1360 (9th Cir.1982).

[3, 4] First, Kyllo has made the required substantial preliminary showing. Three facts regarding Luanne and Danny Kyllo's marital status were omitted from the affidavit. These omissions were material since these facts would have substantially undermined any inference that Danny Kyllo was involved with drugs because his wife was. Furthermore, the fact that Elliott relied on information received from another law enforcement officer does not *ipso facto* mean that Elliott's omissions were not reckless.

the complaint. The letter forbids Peloza from "attempt[ing] to convert students to Christianity or initiating conversations about your religious beliefs." Complaint at ¶ 45. Were this all that the complaint said, I would have little trouble joining the majority. But the complaint alleges more; it contends that "the school district . . . has directed Plaintiff not to discuss any religious matters during any of this 'instructional time,' including student-initiated conversations regarding religion during lunch, class breaks, and before [illegible] after school hours." Complaint at ¶ 3. [illegible] allegation we must take as true. If all that lies behind it is the far narrower warning the majority cites, then Peloza's case will not be long for this world. But we may not presume that this is so.

I believe that, in a broad range of cases, the majority and I could agree about what would or would not constitute a violation of the Establishment Clause. But the majority errs in presuming to know that what is at stake here is Peloza's right to "discuss[ ] his religious beliefs" with students. In doing so, it ignores the fact that this is a Rule 12(b)(6) case. More generally, it gives short shrift to the possibility that we may well be limiting free speech more broadly than the state's compelling interest in avoiding an establishment of religion would warrant.

II

[illegible]in in the majority's part II insofar as it [illegible]ses Peloza's § 1985(3) due process and Establishment Clause claims based on his failure to properly allege a violation of these rights. However, because I conclude that Peloza's free speech claim should not have been dismissed, I would also remand, rather than dismiss, his § 1985(3) claim based on alleged free speech violations.

III

Religion has been used to justify the suppression of speech for centuries. *See Everson v. Board of Ed.*, 330 U.S. 1, 8-10, 67 S.Ct. 504, 507-09, 91 L.Ed. 711 (1947). With the development of a vigorous First Amendment jurisprudence, we have quelled some of the worst abuses. But points of tension remain. We must thus remain vigilant to ensure that in our rush to preserve certain fundamental rights, we do not trample others. Caution is of the essence; only through a methodical and fact-specific jurisprudence can we hope to achieve a proper accommodation.

For the reasons stated above, I respectfully dissent.

UNITED STATES of America, Plaintiff–Appellee,

v.

Danny Lee KYLLO, Defendant–Appellant.

No. 93–30231.

United States Court of Appeals, Ninth Circuit.

Argued and Submitted May 5, 1994

Memorandum Filed June 14, 1994

Memorandum Withdrawn Sept. 29, 1994.

Decided Oct. 4, 1994

Defendant was charged with offense of manufacturing marijuana and filed pretrial motion to suppress all evidence found in search of his residence. The United States District Court for the District of Oregon, Helen J. Frye, J., 809 F.Supp. 787, denied motion and entered conviction and sentence after trial. Defendant appealed. The Court of Appeals, William A. Norris, Circuit Judge, held that: (1) agent's misleading use of chart in search warrant affidavit did not rise to level of reckless disregard for truth that would require suppression of evidence seized under warrant; (2) defendant was entitled to *Franks* evidentiary hearing on whether affidavit omitted information which would have prevented it from establishing probable cause for search; and (3) determination of whether use of thermal imaging device to scan defendant's residence was search required remand for findings on technical capacities of device.

Affirmed in part, and vacated and remanded in part.

1. Criminal Law ⇐394.4(6)

Drugs and Narcotics ⇐188(3)

Special agent's misleading use of electrical usage chart in affidavit for search warrant did not rise to level of reckless disregard for truth that would require suppression of evidence seized under warrant, in prosecution for manufacturing marijuana; agent erroneously claimed that chart was official electric company document, asserted that chart indicated maximum rather than average power usage, and incorrectly assumed that power consumption would decrease linearly with reductions in square footage.

2. Searches and Seizures ⇐191

To be entitled to evidentiary hearing on validity of search warrant affidavit, defendant must make substantial preliminary showing that affidavit contained misleading omission and that omission resulted from deliberate or reckless disregard of truth, after which defendant must demonstrate that affidavit would have been insufficient to establish probable cause if there had been no omission. U.S.C.A. Const.Amend. 4.

3. Searches and Seizures ⇐199

Defendant was entitled to *Franks* evidentiary hearing on motion to suppress evidence seized under search warrant issued pursuant to affidavit that allegedly omitted information about defendant's wife which would have prevented affidavit from establishing probable cause for search; inclusion of information about defendant's separation from wife would have undermined any inferred connection between defendant and wife's drug activity, and remaining information in affidavit was stale, based on multiple hearsay, and insufficient to support probable cause. U.S.C.A. Const.Amend. 4.

4. Drugs and Narcotics ⇐188(3)

Fact that special agent relied on multiple hearsay received from another law enforcement officer as to defendant's marijuana involvement did not by itself preclude finding that special agent's omissions in search warrant affidavit were in reckless disregard of truth and thus required *Franks* hearing on suppression of evidence seized during search. U.S.C.A. Const.Amend. 4.

5. Criminal Law ⇐1181.5(7)

Determination of whether law enforcement officers' use of thermal imaging device to scan defendant's residence was search within meaning of Fourth Amendment required remand for district court to make findings on technical capacities of thermal imaging device, particularly on device's ability to detect shapes of heat-emitting objects inside home. U.S.C.A. Const.Amend. 4.

6. Criminal Law ⇐1208.6(2)

Enhancement of base offense level for possession of firearm may be applied if weapon was present, unless it is clearly improbable that weapon was connected with offense. U.S.S.G. § 2D1.1(b)(1), 18 U.S.C.A. App.

7. Criminal Law ⇐1208.6(2)

Recovery of two firearms in same residence as marijuana growing operation supported application of Sentencing Guidelines enhancing base offense level for possession of firearm. U.S.S.G. § 2D1.1(b)(1), 18 U.S.C.A.App.

Kenneth Lerner, Asst. Federal Public Defender, Portland, OR, for defendant-appellant.

Robert Thomson, Asst. U.S. Atty., Portland, OR, for plaintiff-appellee.

Appeal from the United States District Court for the District of Oregon.

Before: ALARCON, NORRIS, and LEAVY, Circuit Judges.

WILLIAM A. NORRIS, Circuit Judge:

Defendant–Appellant Danny Lee Kyllo was convicted on one count of manufacturing

APPENDIX G

See United States v. Roberts, 747 F.2d 537, 546 n. 10 (9th Cir.1984).

Our opinion in *United States v. Chesher*, 678 F.2d 1353 (9th Cir.1982), is instructive. In *Chesher*, the affiant spoke several times with another police officer who had prepared a report indicating that Chesher was no longer a member of the Hell's Angels. Despite the existence of this report and affiant's conversations with the author of the report, the affiant informed a magistrate that Chesher was a member of the Hell's Angels in order to obtain a search warrant. We reversed the district court's decision not to hold a *Franks* hearing and stated that Chesher had satisfied the requirement of a substantial preliminary showing. *See id.* at 1362. We added:

> Clear proof is not required—for it is at the evidentiary hearing itself that the defendant, aided by live testimony and cross-examination, must prove actual recklessness or deliberate falsity.

Id. As did Chesher, Kyllo has made a sufficient preliminary showing to warrant a *Franks* hearing on this issue.

Second, Kyllo has shown that he was prejudiced by this omission. If material facts about Kyllo's marital status had not been omitted, the information about the wife's arrest would have been neutralized. That would have left in the affidavit three principal factual allegations: 1) Kyllo's electric power consumption was abnormally high; 2) Kyllo's residence emitted heat patterns indicative of a marijuana grow operation; 3) Kyllo once sold marijuana.

As discussed above, the first allegation was false; therefore, we will disregard it in our prejudice inquiry. As we discuss below, the record does not contain sufficient facts for us to determine whether the use of a thermal imaging device constitutes a search under the Fourth Amendment. For that reason, in determining the prejudicial effect of the omission in the search warrant of relevant facts concerning Luanne Kyllo, we will disregard the allegation in the affidavit concerning the heat emitted from Kyllo's residence. What is left in the affidavit, then, is the third allegation,[2] which is hearsay many times over: Elliott heard it from a detective who heard it from another detective who heard it from an informant who overheard Kyllo's offer to sell drugs. Moreover, the information was stale. This third factual allegation, the only one left in the affidavit to consider, would fail to establish probable cause by itself. Accordingly, Kyllo has demonstrated prejudice.

Because Kyllo satisfied the two prongs required to entitle him to a *Franks* hearing, the district court erred in refusing to consider his claim that the affiant recklessly omitted material information about his marital relationship. We therefore remand this issue for a *Franks* hearing.

III

Thermal Imaging Device

[5] Without a warrant, law enforcement officers used a thermal imaging device to scan Kyllo's residence. Kyllo claims that the use of a thermal imaging device constitutes a "search" within the meaning of the Fourth Amendment, and that the fruits of this warrantless search must be suppressed.

In order to determine whether the scan constituted a "search" for purposes of the Fourth Amendment, we must decide whether Kyllo exhibited an actual expectation of privacy and whether that expectation is one that society is prepared to acknowledge as reasonable. *See California v. Ciraolo*, 476 U.S. 207, 211, 106 S.Ct. 1809, 1811–12, 90 L.Ed.2d 210 (1986). But this inquiry cannot be conducted in the abstract. We must have some factual basis for gauging the intrusiveness of the thermal imaging device, which depends on the quality and the degree of detail of information that it can glean. For example, our analysis will be affected by whether, on the one extreme, this device can detect sexual activity in the bedroom, as Kyllo's expert suggests, or, at the other extreme, whether it can only detect hot spots where heat is escaping from a structure.[3]

The district court, however, held no evidentiary hearing and made no findings regarding the technological capabilities of the thermal imaging device used in this case. In particular, the court made no findings on the device's ability to detect the shapes of heat-emitting objects inside a home. Without explicit findings, we are ill-equipped to determine whether the use of the thermal imaging device constituted a search within the meaning of the Fourth Amendment. Accordingly, we remand to the district court for findings on the technological capacities of the thermal imaging device used in this case.

IV

Sentence Enhancement

[6] Finally, Kyllo claims that the district erred in increasing his base offense level for possession of a firearm. "[I]n applying § 2D1.1(b)(1) the court need not find a *connection* between the firearm and the offense. If it finds that the defendant *possessed* the weapon during the commission of the offense, the enhancement is appropriate." *United States v. Restrepo*, 884 F.2d 1294, 1296 (9th Cir.1989). In other words, an enhancement pursuant to U.S.S.G. § 2D1.1(b)(2) may be applied as long as the "weapon was present" unless it is "clearly improbable that the weapon was connected with the offense." *United States v. Willard*, 919 F.2d 606, 609 (9th Cir.1990), *cert. denied*, — U.S. —, 112 S.Ct. 208, 116 L.Ed.2d 167 (1991).

[7] It is undisputed that two guns were present in the same residence as the grow operation. *See United States v. Gillock*, 886 F.2d 220, 223 (9th Cir.1989) (possessing gun in close proximity to drugs is sufficient for firearm enhancement). Furthermore, weighing all the evidence, the district court determined that the enhancement was appropriate and impliedly found that it was not clearly improbable that the guns were connected with the marijuana grow operation. Because this finding is not clearly erroneous, *see United States v. Palmer*, 946 F.2d 97 (9th Cir.1991), the sentence enhancement was appropriate.

The conviction is VACATED and the case is REMANDED for the purposes of a *Franks* hearing on the marital status issue and an evidentiary hearing on the intrusiveness of the thermal imaging device. The district court's order denying the motion to suppress is otherwise AFFIRMED.

---

2. Det. Nafziger told me he contacted Detective Plaseter of the Brookings Police Department who told him that he had a CRI who told him that in late 1989, or early 1990 he was told by this CRI that the CRI overheard a conversation between Danny Kyllo and another unknown person indicating that Danny Kyllo had marijuana for sale

E.R. at 52.

3. *Cf. Dow Chemical Co. v. United States*, 476 U.S. 227, 238, 106 S.Ct. 1819, 1826–27, 90 L.Ed.2d 226 (1986) ("It may well be that surveillance of private property by using *highly sophisticated surveillance equipment not generally available to the public*, such as satellite technology, might be constitutionally prescribed absent a warrant. But the photographs here are *not so revealing of intimate details* as to raise constitutional concerns. Although they undoubtedly give EPA more detailed information than naked eye views, they *remain limited to an outline of the facility's buildings* and equipment.") (emphasis added)

UNITED STATES of America,
Plaintiff-Appellee,

v.

Cesar ZAMORA, Defendant-Appellant.

No. 93-10311.

United States Court of Appeals,
Ninth Circuit.

Argued and Submitted March 17, 1994.

Decided Oct. 6, 1994.

Defendant entered guilty plea in the United States District Court for the District of Nevada, Edward C. Reed, Jr., J., to charges of distribution of cocaine, possession of cocaine with intent to distribute, and carrying firearm in connection with drug trafficking crime, and he appealed from sentencing. The Court of Appeals, Canby, Circuit Judge, held that district court lacked authority to impose upward sentencing departure

FILED mfac

92 DEC -4 PM 5:51

CLERK, U.S. DISTRICT COURT
DISTRICT OF OREGON
PORTLAND, OREGON

BY _____

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF OREGON

UNITED STATES OF AMERICA, Plaintiff,	)	CR No. 92-51-FR
v.	)	OPINION
DANNY KYLLO, Defendant.	)	

Charles H. Turner
United States Attorney
Robert G. Thomson
Assistant United States Attorney
888 S. W. Fifth Avenue, Suite 1000
Portland, Oregon 97204-2024

Attorneys for Plaintiff

Kenneth Lerner
600 One Main Place
101 S. W. Main Street
Portland, Oregon 97204

Attorneys for Defendant

FRYE, Judge:

The matter before the court is the motion of the defendant, Danny Kyllo, to suppress evidence (#30) on the following three grounds: (1) law enforcement officers lacked probable

cause to search his home and misled the magistrate judge with deliberate false statements and omissions of fact in order to obtain a search warrant; (2) the use of a thermal imaging device constituted an impermissible search; and (3) the use of a National Guardsman to operate the thermal imaging device was unlawful.

BACKGROUND

In 1990, a task force of law enforcement officers began investigating Sam Shook for the crime of conspiring to grow and to distribute marijuana. The investigation of Sam Shook was conducted jointly by several agencies, including the United States Department of Interior, the Bureau of Land Management, the Tillamook County Sheriff's Department, and the Oregon State Police Bureau. In July, 1991, four search warrants supported by the sworn affidavit of Special Agent William Elliott of the Bureau of Land Management were issued by United States Magistrate Judge George E. Juba and subsequently executed by the task force.

After these search warrants had been executed and the fruits of the executions of the search warrant had been analyzed, the investigation focused on Tova Shook, the daughter of Sam Shook. On January 16, 1992, between 3:30 and 4:00 a.m., Special Agent Elliott took Sergeant Daniel Haas of the Oregon National Guard to the homes of Kyllo and Shook, where he used a thermal imaging device to detect the level of heat within the homes. Magistrate Judge Juba then issued two more

warrants based on an affidavit prepared by Special Agent Elliott, to search the residence occupied by Tova Shook at 890 Rhododendron Drive, Florence, Oregon and the residence occupied by Kyllo at 878 Rhododendron Drive, Florence, Oregon. The applications for these two search warrants were patterned in a fashion similar to the affidavits for the four prior search warrants.

When the search warrants were executed, law enforcement officers found an indoor marijuana "grow" involving more than one hundred marijuana plants located in the residence at 878 Rhododendron Drive, and dried marijuana and indications that marijuana was being distributed at the residence located at 890 Rhododendron Drive.

On February 20, 1992, a federal grand jury indicted Kyllo for the crime of manufacturing marijuana based on the evidence located in his residence. On February 24, 1992, Kyllo entered a plea of not guilty. The matter was set for trial. On May 18, 1992, Kyllo filed this motion to suppress evidence.

On June 10, 1992, the court granted Kyllo's request for a Franks hearing, limiting the evidence to be received and the issues to be addressed to the statements claimed by Kyllo to be false as to the power usage at the residence located at 878 Rhododendron Drive. The court found that Kyllo had made a substantial showing that the part of the sworn statement of Special Agent Elliott which related to the power usage at the residence located at 878 Rhododendron Drive was made with

reckless disregard for the truth, and that the part of the statement made with reckless disregard for the truth was essential to the determination of the magistrate judge that there was probable cause to issue the search warrant.

CONTENTIONS OF THE PARTIES

Kyllo first contends that Magistrate Judge Juba was misled by deliberate false statements and omissions into issuing the warrant to search Kyllo's residence. Kyllo asserts that if the false statements were corrected or the false statements were excised from the affidavit in support of the search warrant, there would be no probable cause to issue the search warrant. Kyllo also contends that the warrantless use by law enforcement officers of a thermal imaging device constituted an unreasonable search and seizure, and that the use of the National Guard in civilian law enforcement is unlawful.

The government contends that none of the statements of Special Agent Elliott were false or misleading, and the information that Special Agent Elliott provided portrayed the facts as he believed them to be; that the use of a thermal imaging device does not constitute "a search;" and that the assistance of the National Guard was not a violation of the prohibition on military involvement in civilian law enforcement.

APPLICABLE LAW

1. Validity of the Search Warrant

In Franks v. Delaware, 438 U.S. 154, 155-56 (1978), the Supreme Court stated:

> [W]here the defendant makes a substantial preliminary showing that a false statement knowingly and intentionally, or with reckless disregard for the truth, was included by the affiant in the warrant affidavit, and if the allegedly false statement is necessary to the finding of probable cause, the Fourth Amendment requires that a hearing be held at the defendant's request.

If the court determines, as a result of a Franks hearing, that false statements were deliberately or recklessly included in the affidavit and that "the affidavit is insufficient to establish probable cause without the false material, the court must set aside the search warrant and suppress the fruits of the search." United States v. Burnes, 816 F.2d 1354, 1357 (9th Cir. 1987).

This court granted to Kyllo a Franks hearing limited to the issue of whether the following statements of Special Agent Elliott as to the power that was used at the residence located at 878 Rhododendron Drive were made with reckless disregard for the truth in the affidavit that he prepared in support of the search warrant:

> A subpoena for the power usage served on Central Lincoln PUD indicated the address of 878 Rhododendron Dr, Florence was in the name of Danny Kyllo. These records show that the power usage for the residence at 878 Rhododendron Dr. during the months of May through December held a usage that ranged from 730 Kilowatt Hours in the summer months gradually building to a high of 2206 Kilowatt Hours in winter.
>
> . . . .
>
> The Portland General Electric Company has developed a guide for estimating appropriate power usage relative to square footage, type of heating and

> accessories, and the number of people who occupy the residence. Using the Tax assessors report previously mentioned herein, the reported square footage of 540 square feet per each residence would be calculated as follows; The guide indicates a maximum power usage of 1348 KWH for a structure consisting of 1000 square feet, thus a structure of approximately half that square footage should generate a maximum power output of 674 kwh. The difference in maximum KHW's between the guide and the residences would indicate a[n] excessive power usage of 1532 kwh for 878 Rhododendron Dr., and a[n] excessive power usage of 1020 kwh for 890 Rhododendron Dr.
>
> . . . In studying the power usage consumption for 878 Rhododendron Drive it appears that the power is consistently high, which would indicate that this address is consistent with having a continues [sic] marijuana grow operation.

Search Warrant Affidavit, pp. 4-5 (references to exhibits omitted).

Kyllo contends that at the evidentiary hearing, Special Agent Elliott deliberately misrepresented the purpose and function of the PGE chart, as well as what the chart actually means. Kyllo argues that Special Agent Elliott persuaded the magistrate judge that his conclusions were objectively made based on scientific facts provided by PGE, even though, according to Kyllo, Special Agent Elliott did not discuss the facts of this case or the PGE chart with anyone at PGE.

Kyllo contends that PGE has never held out its chart as establishing appropriate power usage, maximum power usage, or normal power usage, and that the magistrate judge was led to believe that PGE had done so by Special Agent Elliott in his affidavit. Kyllo contends that Special Agent Elliott took advantage of the magistrate judge's familiarity with Special

Agent Elliott's prior applications for search warrants and did not fairly disclose to the magistrate judge the shortcomings of this particular affidavit.

Kyllo further submits that the affiant, Special Agent Elliott, distorted the conclusions that could be drawn from power records by taking one month's power usage out of context and making conclusions about that usage without consultation with any expert or knowledgeable individual in the energy field. Kyllo contends that no one can take an isolated month of power usage and fairly conclude that the usage was excessive because the usage that month was above the monthly average. Kyllo also contends that his monthly average usage of power was actually below the average shown on the PGE chart; that the statistics from which the chart is derived are not adaptable to homes located on the Oregon coast; that the statistics have a built-in bias; and that energy consumption is a function of many individual factors, only one of which is the square footage of the residence, despite the fact that Special Agent Elliott informed the magistrate judge that a smaller house would use proportionately less power.

The government contends that Kyllo has not met his burden of showing that the statements made by Special Agent Elliott in the affidavit in support of the search warrant were deliberately false or made with reckless disregard for the truth. The government contends that the PGE chart used

by Special Agent Elliott in his investigation has not been shown to be inaccurate, and that even assuming that the chart was inaccurate, Special Agent Elliott was not reckless in using the chart.

The government contends that while the experts produced by Kyllo agreed that it was improper to cut in half the figures on the PGE chart as Special Agent Elliott did, these same experts also agreed that a smaller home would use less power. The government argues that Special Agent Elliott was, at most, negligent in cutting in half the figures on the PGE chart, and that his action does not amount to recklessness, a deliberate disregard for the truth, or an intentional falsehood. The government contends that Kyllo has not shown that Special Agent Elliott acted with any intent to deliberately mislead the magistrate judge.

ANALYSIS AND RULING

The court has carefully considered all of the evidence presented as to whether or not certain statements made by Special Agent Elliott in his affidavit in support of the search warrant as to the power usage at the residence located at 878 Rhododendren Drive were made by him with a reckless disregard for the truth.

Special Agent Elliott testified that he had used these same power charts in a number of prior cases to successfully predict whether or not there was marijuana growing at a particular location. Special Agent Elliott testified that he did

not intend to mislead the magistrate judge by dividing the power usage in half, and that he believed that this was the correct thing to do at the time.

The court finds that Special Agent Elliott was credible when he testified that he believed PGE's power chart was accurate and that it was reasonable for him to use it. Special Agent Elliott testified that he made no deliberately false statements in his affidavit in support of the search warrant.

Special Agent Elliott investigated this case with Detective David Nafziger of the Oregon State Police Department. Detective Nafziger obtained PGE's power chart in June, 1991 from Detective Bert Royster of the Oregon State Police Department assigned to the Regional Crime Narcotics Enforcement Team. Detective Royster has a broad range of experience in drug investigations and provides training to other law enforcement officers. Under the facts and circumstances of this case, this court concludes that Special Agent Elliott did not act recklessly in using the information provided to him by Detective Nafziger and did not use this information in a reckless manner. Therefore, Kyllo's motion to suppress evidence on the grounds that the magistrate judge was deliberately or recklessly misled by false statements and omissions into issuing the warrant for the search of his residence is denied.

2. Warrantless Use of a Thermal Imaging Device

Kyllo contends that the use by law enforcement officers

of a thermal imaging device to detect the heat emanating from his home without first obtaining a warrant to do so constituted an unreasonable search and seizure in violation of the Fourth Amendment.

"[T]he invasion of a constitutionally protected area by federal authorities is, as the Court has long held, presumptively unreasonable in the absence of a search warrant." Katz v. United States, 389 U.S. 347, 361 (1967). Technological progress since the Fourth Amendment was enacted has forced courts to expand this concept of a government "invasion" beyond purely physical intrusions to include non-physical invasions under certain circumstances: "[T]he use of sophisticated modern mechanical or electronic devices and the frightening implications of their possible development have led to abandonment of the test of physical trespass within the protected area and a broadening of protection to cover a 'reasonable expectation of privacy.'" United States v. Solis, 536 F.2d 880, 886 (9th Cir. 1976).

Under Katz, an expectation of privacy is only reasonable where (1) the individual manifests a subjective expectation of privacy in the object of the challenged search; and (2) society is willing to recognize that subjective expectation as reasonable. Id. at 361. The second element turns on "whether the government's intrusion infringes upon the personal and societal values protected by the Fourth Amendment." Oliver v. United States, 466 U.S. 170, 182-83 (1984).

Kyllo contends that he had a reasonable expectation of privacy in the heat generated within his home; that he did all he reasonably could do to contain the heat in his home; and that society "is well prepared to regard it reasonable that the citizenry not be surveilled by sophisticated electronic technology in order to detect personal lifestyles, including heat and cooling, within their homes." Memorandum of Law in Support of Motion to Suppress Evidence, p. 28.

The government contends that Kyllo did nothing to indicate his desire to protect his privacy in the heat generated within his home, and that even if the court found that Kyllo had a subjective expectation of privacy in the heat generated within his home, society would not consider that expectation reasonable. The government argues that heat generation is fundamentally different from telephone conversations, which were the subject of dispute in Katz, that by their nature are made with the expectation of privacy. The government argues that Special Agent Elliott's detection of the heat emanating from Kyllo's home is similar to the observation of smoke coming from the chimney of a house and inferring that the owner had a fire in the fireplace. The government contends that the detection of the heat emanating from Kyllo's home was not an intrusion into the home; that the detection of the heat lost to the outside of the home did not reveal intimate details as to the inside of the home; and that none of the interests which form the basis for the need for protection of the

curtilage, namely the intimacy, the personal autonomy, and the privacy associated with a home, are threatened by thermal imagery.

This court agrees with the court in United States v. Penny-Feeney, 773 F. Supp. 220 (D. Haw. 1991), which found that the use of a device to detect surface waste heat from a home does not amount to a "search" of the home within the meaning of the Fourth Amendment. Id. at 228. The court finds that the use of the thermal imaging device here was not an intrusion into Kyllo's home. No intimate details of the home were observed, and there was no intrusion upon the privacy of the individuals within the home.

Kyllo's motion to suppress evidence on the grounds that Special Agent Elliott's use of a thermal imaging device to detect the heat emanating from Kyllo's home without first obtaining a warrant constituted an unreasonable search and seizure in violation of the Fourth Amendment is denied.

3. Use of National Guardsman to Operate Thermal Imaging Device

Kyllo moves to suppress evidence based on his contention that the use of a member of the Oregon National Guard to enforce federal law in the State of Oregon is unlawful under the Posse Comitatus Act. Kyllo argues that the Oregon National Guard is a component of the federal Army National Guard, which cannot be used for domestic law enforcement without legislative approval. The government contends that

National Guardsmen play a dual role as both federal and state employees but remain state employees, and thus are exempt from the restrictions of the federal Posse Comitatus Act unless they are called into federal service by the President of the United States.

Staff Sergeant Haas, who operated the thermal imaging device, is a member of the Oregon National Guard and is an employee of the State of Oregon until and unless he is called into federal service. The Commander-in-Chief of Staff Sergeant Haas is the Governor of the State of Oregon. The Supreme Court has recognized the dual nature of a National Guard and the fact that National Guardsmen only lose their status as a member of a state National Guard when they are "drafted into federal service by the President." Perpich v. Department of Defense, ___ U.S. ___, 110 S.Ct. 2418, 2424 (1990). As a member of the Oregon National Guard, Staff Sergeant Haas is permitted to assist the federal government in law enforcement, as he did here. The National Guard is specifically authorized by Congress to assist in counter-drug activities when not drafted into federal service by the President. 32 U.S.C. § 112.

Kyllo's motion to suppress evidence on the grounds that it is unlawful to use a member of the Oregon National Guard in federal law enforcement in the State of Oregon is denied.

CONCLUSION

The court finds that the statements made as to the power

usage at the residence at 878 Rhododendron Drive, Florence, Oregon were not made with reckless disregard for the truth and, as such, should not be omitted from the affidavit in support of the search warrant; that the use of a thermal imaging device does not constitute an impermissible search under the Fourth Amendment; and that the use of a National Guardsman to operate the thermal imaging device was not unlawful.

Kyllo's motion to suppress evidence (#30) is denied.

DATED this 4 day of December, 1992.

Helen J. Frye

HELEN J. FRYE
United States District Judge

APPENDIX H

FILED

96 MAR 15 PM 3:13

U.S. DISTRICT COURT
DISTRICT OF OREGON
PORTLAND, OREGON

BY

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF OREGON

UNITED STATES OF AMERICA, Plaintiff, v. DANNY KYLLO, Defendant.	CR No. 92-51-FR ORDER

FRYE, Judge:

IT IS HEREBY ORDERED that the defendant's motion to suppress is DENIED. An updated presentence report is ordered. Upon the completion of the updated presentence report, the court will schedule a sentencing hearing in order to consider the issue of an appropriate sentence at this stage in the proceedings.

DATED this 15 day of March, 1996.

HELEN J. FRYE
United States District Judge

FILED

93 MAR 15 PM 3:13

CLERK, U.S. DISTRICT COURT
DISTRICT OF OREGON
BY

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF OREGON

UNITED STATES OF AMERICA, Plaintiff, v. DANNY KYLLO, Defendant.	CR No. 92-51-FR OPINION

Kristine Olson
United States Attorney
Robert G. Thomson
Assistant United States Attorney
888 S. W. Fifth Avenue, Suite 1000
Portland, Oregon 97204-2024

Attorneys for Plaintiff

Kenneth Lerner
1400 Security Pacific Plaza
1001 S. W. Fifth Street
Portland, Oregon 97204

Attorney for Defendant

FRYE, Judge:

The matter before the court is the motion of the defendant, Danny Kyllo, to suppress evidence upon remand of this case from the United States Court of Appeals for the Ninth Circuit.

173

On December 2, 1994, this court denied Kyllo's motion to suppress evidence. Kyllo argued, among other grounds, that:

1) the law enforcement officers had misled the magistrate judge who issued the search warrant with deliberate omissions of fact in order to obtain the search warrant; and

2) the use of a thermal imaging device constituted an impermissible search.

On October 4, 1994, the United States Court of Appeals for the Ninth Circuit remanded the case for a further hearing regarding 1) the technological capacities of the thermal imaging device used in this case; and 2) whether omissions of material facts regarding Kyllo's marital status resulted from a deliberate or reckless disregard of the truth. United States v. Kyllo, 37 F.3d 526 (9th Cir. 1994).

The court has conducted a full evidentiary hearing allowing the parties an opportunity to present evidence as to the issues on remand.

1. Warrantless Use of a Thermal Imaging Device

The United States Court of Appeals for the Ninth Circuit wrote:

> Without a warrant, law enforcement officers used a thermal imaging device to scan Kyllo's residence. Kyllo claims that the use of a thermal imaging device constitutes a "search" within the meaning of the Fourth Amendment, and that the fruits of this warrantless search must be suppressed.
>
> In order to determine whether the scan constituted a "search" for purposes of the Fourth Amendment, we must decide whether Kyllo exhibited an actual expectation of privacy and whether that expectation is one that society is prepared to acknowledge as reasonable. See California v. Ciraolo, 476 U.S. 207, 211, 106 S.Ct. 1809, 1811-12, 90 L.Ed.2d 210 (1986). But this inquiry cannot be conducted in the abstract. We must have some factual basis for gauging the intrusiveness of the thermal imaging device, which depends on the quality and the degree of detail of information that it can glean. For example, our analysis will be affected by whether, on the one extreme, this device can detect sexual activity in the bedroom, as Kyllo's expert suggests, or, at the other extreme, whether it can only detect hot spots where heat is escaping from a structure.
>
> The district court, however, held no evidentiary hearing and made no findings regarding the technological capabilities of the thermal imaging device used in this case. In particular, the court made no findings on the device's ability to detect the shapes of heat-emitting objects inside a home.

> Without explicit findings, we are ill-equipped to determine whether the use of the thermal imaging device constituted a search within the meaning of the Fourth Amendment. Accordingly, we remand to the district court for findings on the technological capacities of the thermal imaging device used in this case.

37 F.3d at 530-31 (footnote omitted).

The AGEMA Thermovision 210 imaging device used by Staff Sergeant Daniel Haas of the Oregon National Guard in the investigation of this case is a non-intrusive device which emits no rays or beams and shows a crude visual image of the **heat** being radiated from the **outside** of the house. The device was operated from the passenger seat of a vehicle parked on the street. The device cannot and did not show any people or activity within the walls of the structure.

In his report, Sergeant Haas states, in part: "On the 16th of Jan. the thermal scan showed high heat loss from the roof of 878 Rhododendron above the garage and from the wall facing 890 Rhododendon [sic] as shown in the two (2) diagrams below. . . . The center bldg. showed much warmer than the blds [sic] on either side." Sergeant Haas testified at the hearing that "[t]he main conclusion that I reached was that there was definitely something unusual within the structure that was generating that excess heat." Transcript, p. 139.

Under Katz v. United States, 389 U.S. 347, 361 (1967), an expectation of privacy is only reasonable where 1) the individual manifests a subjective expectation of privacy in the object of the challenged search; and 2) society is willing to recognize that subjective expectation as reasonable. The second element turns on "whether the government's intrusion infringes upon the personal and societal values protected by the Fourth Amendment." Oliver v. United States, 466 U.S. 170, 182-83 (1984).

The court finds that the use of the thermal imaging device here was not an intrusion into Kyllo's home. No intimate details of the home were observed, and there was no intrusion upon the privacy of the individuals within the home. The device used cannot

penetrate walls or windows to reveal conversations or human activities. The device recorded only the heat being emitted from the home.

The use of a device to detect surface waste heat from a home does not amount to a "search" of the home within the meaning of the Fourth Amendment. Kyllo did not have a reasonable expectation of privacy in the heat emanating from his home, and the device used did no more than detect the heat emanating from his home. See United States v. Myers, 46 F.3d 668, 669-70 (7th Cir. 1995); United States v. Ford, 34 F.3d 992, 995-97 (11th Cir. 1994); and United States v. Pinson, 24 F.3d 1056, 1058-59 (8th Cir. 1994).

2. Omissions Regarding Kyllo's Marital Status

In his affidavit in support of the search warrant, the law enforcement officer, Special Agent William V. Elliott, stated that 'Det. Dorman told me that he was aware that on 12-06-90, Danny Kyllo's wife, Luanne Kyllo, was arrested for delivery and possession of a controlled substance. A check with DMV revealed that Danny Kyllo and Luanne Kyllo had a 1972 Datsun . . . which was registered at [Danny Kyllo's address]." Search Warrant Affidavit, p. 3.

The United States Court of Appeals for the Ninth Circuit stated, in part:

> While no statement in this paragraph is false, Elliott omitted the following uncontested facts: at the time of Luanne Kyllo's arrest, Luanne was separated from Danny Kyllo; she was living in a different state, California; and, she was using her maiden name. . . .
>
> . . . .
>
> . . . These omissions were material since these facts would have substantially undermined any inference that Danny Kyllo was involved with drugs because his wife was. . . .
>
> . . . .
>
> Second, Kyllo has shown that he was prejudiced by this omission. If material facts about Kyllo's marital status had not been omitted, the information about the wife's arrest would have been neutralized. That would have left in the affidavit three principal factual allegations: 1) Kyllo's electric power consumption was abnormally high; 2) Kyllo's residence emitted

heat patterns indicative of a marijuana grow operation; 3) Kyllo once sold marijuana.

> As discussed above, the first allegation was false; therefore, we will disregard it in our prejudice inquiry. As we discuss below, the record does not contain sufficient facts for us to determine whether the use of a thermal imaging device constitutes a search under the Fourth Amendment. For that reason, in determining the prejudicial effect of the omission in the search warrant of relevant facts concerning Luanne Kyllo, we will disregard the allegation in the affidavit concerning the heat emitted from Kyllo's residence. What is left in the affidavit, then, is the third allegation, which is hearsay many times over: Elliott heard it from a detective who heard it from another detective who heard it from an informant who overheard Kyllo's offer to sell drugs. Moreover, the information was stale. This third factual allegation, the only one left in the affidavit to consider, would fail to establish probable cause by itself. Accordingly, Kyllo has demonstrated prejudice.

37 F.3d at 529-30 (footnote omitted).

This court heard testimony as to whether the affiant deliberately or recklessly omitted material facts and, if so, whether the omitted material facts resulted from a deliberate or reckless disregard for the truth. The affiant, Special Agent Elliott, testified that he believed Luanne Kyllo was living with Danny Kyllo at 878 Rhododendron Drive based upon:

> the fact that the vehicle that Detective Dorman spotted out in front of 878 Rhododendron Drive was currently registered to Danny and Luanne Kyllo. And then the second piece of information was information provided to me by Detective Nafziger who had contact with Brookings Police Department in which they had an informant who related to him that during a conversation Danny Kyllo regarding -- talking about a marijuana transaction stated that if he wasn't at the residence then Luanne would be there in order to get him the marijuana.

Transcript, p. 263.

Special Agent Elliott testified that he did not request that Detective Dorman obtain the police report regarding the arrest of Luanne Kyllo in November of 1990, which indicated that Luanne Kyllo used to be married to Danny Kyllo and was living in California at the time of Danny Kyllo's arrest. Special Agent Elliott testified that "[w]e normally do not ask for police reports when we get the basic information like that." Transcript, p. 264.

On cross-examination, Special Agent Elliott stated that Detective Dorman told him

that he had contacted the landlord and the landlord had told Detective Dorman that "Danny Kyllo was living at 878 Rhododendron Drive." Transcript, p. 266. Special Agent Elliott testified that he did not put the information that Detective Dorman got from the landlord into his affidavit in support of the search warrant.

Detective Dorman testified at the hearing that he was personally involved in the arrest of Luanne Kyllo in November of 1990. Detective Dorman testified that he had assisted another officer in securing and in searching the residence in the execution of the search warrant and the arrest of a Luanne Schirman, who was identified through the Department of Motor Vehicles records in the affidavit in support of the search warrant as Luanne Kyllo. Detective Dorman testified that he did not prepare the affidavit in support of the search warrant in November of 1990; that he did not write any reports in the case; and that he had not reviewed the affidavit in support of the search warrant prior to the execution of the search warrant in November of 1990. Detective Dorman testified that he had no independent recollection from the 1990 arrest that Luanne Kyllo was living in California, and no independent recollection from the 1990 arrest as to Luanne Kyllo's marital status. Detective Dorman testified that in January of 1992, when he was assisting Special Agent Elliott in the investigation of Danny Kyllo, he did not connect the cases.

There is no evidence that the affiant, Special Agent Elliott, knew of and deliberately or recklessly omitted from the affidavit the facts that l) at the time of Luanne Kyllo's arrest, she was separated from Danny Kyllo; 2) that she was living in a different state, the State of California; and 3) that she was using her maiden name. The court finds Detective Dorman to be credible when he stated that in January of 1992, when he was assisting Special Agent Elliott in the investigation of Danny Kyllo, he did not connect that investigation with the arrest of Luanne Kyllo in November of 1990. There is evidence that Special Agent Elliott omitted from the affidavit the fact that only Danny Kyllo's name was associated with the address by the landlord. However, the facts in the case do not warrant

a finding that Special Agent Elliott deliberately or recklessly omitted this information from the affidavit in order to mislead the magistrate judge. The fact that only Danny Kyllo's name was associated with the address by the landlord is not inconsistent with the statement that "[a] check with DMV revealed that Danny Kyllo and Luanne Kyllo had a 1972 Datsun . . . which was registered at [Danny Kyllo's address]." Search Warrant Affidavit, p. 3. There was no testimony that Special Agent Elliott or Detective Dorman omitted any evidence known to them that would lead the agent or the magistrate judge to believe that Luanne Kyllo did not reside at 878 Rhododendron Drive.

RULING OF THE COURT

In Franks v. Delaware, 438 U.S. 154 (1978), the United States Supreme Court held that a defendant could challenge a facially valid affidavit by making a substantial preliminary showing that "(1) the affidavit contains intentionally or recklessly false statements, and (2) the affidavit purged of its falsities would not be sufficient to support a finding of probable cause." United States v. Lefkowitz, 618 F.2d 1313, 1317 (9th Cir.), cert. denied, 449 U.S. 824 (1980). In United States v. Stanert, 762 F.2d 775, 781 (9th Cir. 1985), the court held that a defendant can challenge the affidavit in support of a search warrant which is valid on its face when it contains deliberate or reckless omissions of facts that tend to mislead.

If, after the limited evidentiary hearing, the court concludes that the magistrate judge or judge was misled by information in the affidavit that the affiant knew was false, or would have known was false except for his reckless disregard of the truth, then suppression is an appropriate remedy. United States v. Leon, 468 U.S. 897, 923 (1984).

In United States v. Kyllo, 37 F.2d 526 (9th Cir. 1994), the appeals court concluded that it was not clearly erroneous for the district court to find that the statements in the affidavit of Special Agent Elliott regarding the power usage at the Kyllo home did not rise to the level of reckless disregard for the truth. Id. at 529. Upon remand, the court conducted

a further hearing to determine whether the affidavit contained intentionally or recklessly false statements or, put another way, whether the magistrate judge or judge was misled by information in the affidavit that the affiant knew was false or would have known was false except for his reckless disregard of the truth. After the evidentiary hearing, the court found that the false statements or omitted facts were not deliberate and were not made in reckless disregard for the truth or for the purpose of misleading the magistrate judge. In light of these findings, suppression is not an appropriate remedy in this case.

To insure that the magistrate judge's function has been adequately performed, the court must "conscientiously review the sufficiency of affidavits on which warrants are issued." Illinois v. Gates, 462 U.S. 213, 239 (1983). The review must determine whether the magistrate judge in the case had "a 'substantial basis for . . . conclud[ing]' that a search would uncover evidence of wrongdoing." Id. at 236 (quoting Jones v. United States, 362 U.S. 257, 271 (1960)). In the absence of any finding of a deliberate or reckless disregard of the truth, this court concludes that the magistrate judge had a substantial basis for finding probable cause to believe that a search would uncover evidence of wrongdoing.

CONCLUSION

Kyllo's motion to suppress is denied. An updated presentence report is ordered. Upon the completion of the updated presentence report, the court will schedule a sentencing hearing in order to consider the issue of an appropriate sentence at this stage in the proceedings.

DATED this 15 day of March, 1996.

HELEN J. FRYE
United States District Judge

APPENDIX I

AO 245 S (Rev. 4/90) Sheet 1 - Judgment in a Cr

FILED

UNITED STATES DISTRICT COURT
District of Oregon

Entered on the Docket on
11-1-96
DONALD M. CINNAMOND
By _____ Deputy

1996 OCT 25 P 2:53

CLERK, U.S. DISTRICT COURT
DISTRICT OF OREGON
BY _____

UNITED STATES OF AMERICA
v.
DANNY LEE KYLLO

JUDGMENT IN A CRIMINAL CASE
(For Offenses Committed On or After November 1, 19

Case Number: Cr 92-51FR

Ken Lerner
Defendant's Attorney

THE DEFENDANT:
X pleaded guilty to count(s) 1 after a plea of not guil
_ was found guilty on count(s) _____

Accordingly, the defendant is adjudged guilty of such count(s), which involve the following offenses:

Section	Nature of Offense	Date Offense Concluded	Count Number(s)
21 USC 841(a)(1)	manufacture of marijuana	1/24/92	1

(Enhancement filed charging manufacture of 100 or more marijuana plants, 21 USC 841(a)(1) & 841(b)(1)(B)(vii))

The defendant is sentenced as provided in pages 2 through 3 of this judgment. The sentence is imposed pursuant to the Sentenc Reform Act of 1984.

_ The defendant has been found not guilty on count(s) _____, and is discharged as to s count(s).

_ Count(s) _____ (is)(are) dismissed on the motion of the United States.

X It is ordered that the defendant shall pay a special assessment of $ 50.00, for count(s) 1, whic be due _ immediately _ as follows:

IT IS FURTHER ORDERED that the defendant shall notify the United States Attorney for this district within 30 days of any chang name, residence, or mailing address until all fines, restitution, costs, and special assessments imposed by this judgment are fully paid.

Defendant's Soc. Sec. No.: 543-88-1551

Defendant's Date of Birth: 6/29/65

Defendant's Mailing Address:
871 Cold Stream Rd
Coos Bay, OR 97420

Defendant's Residence Address:
see above

OCTOBER 21,1996
Date of Imposition of Sentence

Helen J. Frye
Signature of Judicial Officer

HELEN J. FRYE, U.S. DISTRICT JUDGE
Name & Title of Judicial Officer

10/22/96
Date

Defendant: Danny Lee Kyllo
Case Number: 92-51FR

IMPRISONMENT

The defendant is hereby committed to the custody of the United States Bureau of Prisons to be imprisoned for a term of one (1) month

X The court makes the following recommendations to the Bureau of Prisons: that the defendant serve the term of imprisonment at the La County Corrections Work Release Facility in Eugene, Oregon and that he do so beginning on or after April 1,1997.

_ The defendant is remanded to the custody of the United States Marshal.
_ The defendant shall surrender to the United States Marshal for this district
_ at _____ on _____
_ as notified by the United States Marshal.
X The defendant shall surrender for service of sentence at the institution designated by the Bureau of Prisons,
X before 2 p.m. on or after April 1,1997
_ as notified by the United States Marshal.
_ as notified by the probation office.

RETURN

I have executed this judgment as follows:

_____

_____

_____

_____

Defendant delivered on: _____ to _____ at

_____, with a certified copy of this judgment.

_____
United States Marshal

By _____
Deputy Marshal

Defendant: Danny Lee Kyllo
Case Number: 92-51FR

SUPERVISED RELEASE

Upon release from imprisonment, the defendant shall be on supervised release for a term of four (4) years.

The defendant shall comply with the standard conditions that have been adopted by this Court (set forth below). If this judgment imposes a restitution obligation, it shall be a condition of supervised release that the defendant pay any such restitution that remains unpaid at the commencement of the term of supervised release. The defendant shall comply with the following special conditions:

1. The defendant shall adhere to a home detention schedule as prescribed by the probation officer for a period of five (5) months which may include electronic monitoring as a means of verifying complaince as directed by the probation officer. The defendant shall pay all or a part of the costs of electronic monitoring as determined by the probation officer.

The supervised release portion of the sentence shall commence today upon completion of the imposition of sentence. The home confinement portion of the sentence shall commence as soon as the probation officer can make the appropriate arrangements.

No fine is being ordered in this case as the defendant has no financial resources nor appreciable earning ability.

STANDARD CONDITIONS OF SUPERVISION

While the defendant is on supervised release pursuant to this judgment, the defendant shall not commit another federal, state or local crime. In addition:

1) The defendant shall report in person to the probation office for the district to which he or she is released within 72 hours of release from the custo of the Bureau of Prisons.
2) The defendant shall not commit another federal, state or local crime and shall not illegally possess a controlled substance. Revocation of probati or supervised release is mandatory for illegal possession of a controlled substance.
3) The defendant shall not possess a firearm, destructive, or dangerous device.
4) If the defendant illegally uses drugs or abuses alcohol, has a history of drug or alcohol abuse, or drug use or possession is determined to be element of the defendant's criminal history or instant offense, the defendant shall participate in a substance abuse treatment program as directed the probation officer which may include urinalysis testing to determine if the defendant has used drugs or alcohol.
5) The defendant shall submit to a search of his/her person, residence, office or vehicle, when conducted by a United States Probation Officer a reasonable time and in a reasonable manner, based upon reasonable suspicion of contraband or evidence of a violation of a condition of supervisi Failure to submit to a search may be grounds for revocation. The defendant shall warn any other residents that the premises may be subject searches pursuant to this condition.
6) The defendant shall not leave the judicial district without the permission of the court or probation officer.
7) The defendant shall report to the probation officer as directed by the court or probation officer, and shall submit a truthful and complete written rep within the first five days of each month.
8) The defendant shall answer truthfully all inquiries by the probation officer and follow the instructions of the probation officer. The defendant n decline to answer inquiries if a truthful response would tend to incriminate him or her. Such a refusal to answer may constitute grounds revocation.
9) The defendant shall support his or her dependents and meet other family responsibilities to the best of his or her financial ability.
10) The defendant shall work regularly at a lawful occupation unless excused by the probation officer for schooling, training, or other acceptable reas
11) The defendant shall notify the probation officer within 72 hours of any change in residence or employment.
12) The defendant shall refrain from excessive use of alcohol and shall not purchase, possess, use, distribute or administer any narcotic or o controlled substance, or any paraphernalia related to such substances, except as prescribed by a physician. If the probation officer has reason cause to believe the defendant is using illegal drugs or is abusing alcohol, the defendant shall submit to urinalysis testing, breathalyzer testing reasonable examination of the arms, neck, face, and lower legs.
13) The defendant shall not knowingly frequent places where controlled substances are illegally sold, used, distributed, or administered.
14) The defendant shall not knowingly associate with any persons engaged in criminal activity, and shall not knowingly associate with any pe convicted of a felony unless granted permission to do so by the probation officer.
15) The defendant shall permit a probation officer to visit him or her at any reasonable time at home or elsewhere, and shall permit confiscation of contraband observed in plain view by the probation officer.
16) The defendant shall notify the probation officer within 72 hours of being arrested or questioned by a law enforcement officer.
17) The defendant shall not enter into any agreement to act as an informant or special agent of a law enforcement agency without the permission o court.
1' As directed by the probation officer, the defendant shall notify third parties of risks that may be occasioned by his or her criminal record or per history and characteristics, and shall permit the probation officer to make such notifications and to confirm the defendant's compliance with a notification requirement. This requirement will be exercised only when the probation officer believes a reasonably foreseeable risk exist law mandates such notice. Unless the probation officer believes the defendant presents an immediate threat to the safety of an identifiable indivi notice shall be delayed so t he probation officer can arrange for a court hearing and the defendant can obtain legal counsel.

No. _____

IN THE
SUPREME COURT OF THE UNITED STATES
OCTOBER TERM 1999

DANNY LEE KYLLO,

Petitioner-Appellant.

v.

UNITED STATES OF AMERICA,

Respondent-Appellee,

Petition for a Writ of Certiorari
to the United States Court of Appeals
for the Ninth Circuit

MOTION FOR LEAVE TO PROCEED IN FORMA PAUPERIS

NOW COMES Danny Lee Kyllo, through his counsel Kenneth Lerner and moves the court pursuant to Supreme Court Rule 39 for leave to file a Petition for Writ of Certiorari In Forma Pauperis. Mr. Kyllo was determined to be indigent by the United States District Court for the District of Oregon at the time of his arraignment and present counsel was appointed under the Criminal Justice Act, 18 USC §3006A. Current counsel has continued to represent Mr. Kyllo since the initial appointment on the basis of his continuing obligation under the Criminal Justice Act.

DATED: March 3, 2000

Kenneth Lerner, OSB #79484
Attorney for Petitioner-Appellant
851 S.W. Sixth Avenue, Suite 1600
Portland, Oregon 97204
(503) 223-0042
fax: (503) 223-3151